

A222 Exploring philosophy



The Philosophy of Religion

Timothy Chappell





Book 2

The Philosophy of Religion

Timothy Chappell



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Preface

In this book we turn from the self to God. We turn from questions about personal identity, and what it is to be someone, to the area of philosophy called the philosophy of religion. We will begin by asking what the words ‘God’ and ‘religion’ mean, and what it means to ask philosophical questions about them; then we shall consider the familiar claim that there can be *no* argument about faith. We will look at a variety of arguments for God’s existence. These will include the medieval philosopher Thomas Aquinas’s ‘Second Way’, which is an argument about causes and effects, and the ‘argument from design’ – the argument that deduces God’s existence from the apparent presence of design in the world. Our detailed discussion of design arguments will lead us to the problem of evil – the question why, if there is a good and all-powerful God, there is so much evil in the world. We will then conclude by raising some questions about miracles and religious experience. Along the way, a number of issues about good and bad, right and wrong, benevolence and evil will come up (most obviously, perhaps, with the problem of evil). So this book will set the stage for our discussion of ethics in Book 3.

The set book, John Cottingham’s *Western Philosophy*, is the source for most of the readings in this book, and has a lot of other useful material in it which is relevant to the philosophy of religion, especially in Part VI, ‘God and Religion’, and Part XII, ‘Human Life and its Meaning’. You should keep it handy while you are studying this book.

On the *Exploring philosophy* website, you will find audio recordings involving a number of experts on some of the most important issues raised in this book. These discussions provide an easy way in to some of the questions, so make sure you take full advantage of them! On the website, you will also find a quiz for each chapter.

One other resource worth mentioning is the glossary, in which most of the key terms in the philosophy of religion are explained. You can find this at the back of this book (entries are also included in the glossary on the website). Glossed terms are emboldened at their first (or at least an early) use in the text.

Chapter 1

Introducing the philosophy of religion

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Aims

By the end of this chapter, you should:

- be clear about the meaning of the words 'God' and 'religion'
- understand what the main questions are in philosophy of religion, and which of them most interest you
- have a better sense of the differences between philosophical questions or arguments and other kinds of questions or arguments
- have thought about the relation between belief and evidence, faith and proof
- have a sense of the variety of kinds of argument that can be presented for or against God's existence, and of how to categorise this variety
- have thought carefully about Aquinas's 'Second Way', and about possible questions and criticisms that it faces.

Materials you will need

In this chapter, you will need to refer to the following reading in the set book:

- Part VI, Reading 2, 'The Five Proofs of God: Thomas Aquinas, *Summa Theologiae*'.

You will need to listen to the following audio recordings (available on the *Exploring philosophy* website):

- Introducing the philosophy of religion
- Faith and reason.

You will also be directed to the website for an end-of-chapter quiz.

1.1 Introduction

In this chapter, we will consider the meanings of the key terms ‘God’ and ‘religion’; identify some key questions in the philosophy of religion; think about the difference between philosophical and non-philosophical questions about religion; and look at the often-discussed question about whether argument and evidence are even possible when we are thinking about religion. Then we will note the variety of possible ways of arguing for and against God’s existence; distinguish three different arguments; and describe and assess one of them in more detail.

Getting straight what we mean

‘When I use a word,’ Humpty Dumpty said in rather a scornful tone, ‘it means just what I choose it to mean – neither more nor less.’

‘The question is,’ said Alice, ‘whether you *can* make words mean different things.’

(Carroll, 1978 [1871], p. 168)

Alice’s point is clear. If we are to understand each other, then we have to mean the same by the words we use. We can’t just use words to mean whatever we choose them to mean, as Humpty Dumpty does (or says he does) in Lewis Carroll’s *Through the Looking-Glass* (1871). Instead, we have to try to use our words as precisely and consistently as we can.

Precision and consistency with words is important everywhere. As you will have found in Book 1, it is particularly important in philosophy. So in the interests of precision, here is our first activity.

Activity

First, write down brief (five- to fifteen-word) definitions of what you understand these two words to mean in ordinary everyday usage.

God

Religion

Don’t read any further until *after* you’ve written down your definitions.



Figure 1.1 John Tenniel, ‘Humpty Dumpty and Alice’, colour litho, cover illustration from Carroll, L. (1898 [1871]) *Through the Looking-Glass*, London. Bibliothèque da la Sorbonne, Paris. Photo © Archives Charmet/ The Bridgeman Art Library.

Now, find a dictionary. You could use the online version of the *Oxford English Dictionary*, available through the Open University's Library website. How does your dictionary define the words?

Discussion

You may be wondering why I said that you should write your own definitions for these words before looking them up in a dictionary. I had at least three reasons:

- 1 To encourage you to think for yourself, instead of just accepting what someone else says. (This is what you should always do in philosophy.)
- 2 Because there might be differences between what you say and what your dictionary says, and these differences might be interesting.
- 3 Because your definitions might be better than the dictionary's! Some people apparently think that dictionaries are always right. But they're not. Dictionaries are written by people, and people make mistakes. (Even good dictionaries differ in the definitions they offer.)

So what were your own definitions of God and religion? How did they compare with the dictionary's? If there were differences, why do you think that was?

Here are two possible definitions of these terms:

God

The supreme personal being existing beyond the world, creator and ruler of the universe.

religion

System of belief in and worship of a supernatural power or God.

As I say, these possible definitions are not beyond challenge just because they might appear in a dictionary. As it happens, I made them up, just to give two starting-points for our discussion. So perhaps they can be improved upon.

Perhaps you can improve on them yourself. For example, you might improve my provisional definition of 'religion' by examining the origin of the word.

god /gɒd/ *n.* In branch II now usu. **G-**. [OE *god* (pl. *godu* neut., *godas* masc.) = OFris., OS (Du.) *god* masc., OHG *got* (G *Gott*) masc., ON *goð* neut. (as branch I), *guð* masc. and neut. (as branch II), Goth. *gub* (pl. *guda* neut.), f. Gmc, prob. ult. f. IE, repr. by Skt *hū-* invoke the gods.] 11 A superhuman person regarded as having power over nature and human fortunes; a deity. Also, *the* deity of a specified area of nature, human activity, etc. OE. 2 An image or object (as a plant or an animal) worshipped as symbolizing or constituting the visible habitation of a divinity or as itself possessing divine power; an idol. OE. 3 *transf.* a An adored, admired, or supremely powerful person. OE. b An adored or worshipped object; something exercising great or supreme influence. L16. 4 *Theatr.* In *pl.* (The occupants of) the gallery. M18.

1 MILTON By combat to decide whose God is God, Thine or whom I with Israel's Sons adore. DAY LEWIS *Pietas*—a habit of respect for gods, ancestors, parents, country. D. CUPITT The gods have set bounds which cannot be overstepped with impunity. *Health Shopper* The Romans dedicated the garlic bulb to Mars, the god of war. 2 POPE Statues, dirty Gods, and Coins. R. GRAVES The Romans trusted to their own visible tutelary gods, the golden Eagles of their legions. 3a SHAKES. *Rom. & Jul.* Swear by thy gracious self, which is the god of my idolatry. F. POLLOCK The ruling gods of the circulating libraries. b P. SIDNEY Like a man whose will was his God, and his hand his law. 4 H. ROSENTHAL It was a wonderful experience to be downstairs instead of in the gods.

Figure 1.2 A definition of God in Brown L. (ed.) (1993), *The New Shorter Oxford English Dictionary*, Oxford, Oxford University Press. Photographed by Beate Lie. Photo: © Beate Lie.

The origins of words are not always philosophically interesting or important. But sometimes they are, and 'religion' may be a case in point. Though the origins of the word are not completely clear, it seems to come from the Latin *re-*, meaning 'back' or 'again', and *ligio*, meaning 'a tie' or 'a connection'. So if we go by its origins, the word 'religion' could apparently mean either (or both?) of two very different things. It could mean a *tying back*, a restraint, a bind that stops you doing things. It could also mean a *reconnection*, a way of getting back in touch – perhaps, back in touch with the divine. It is interesting that, even today, the foes of religion see religion as almost exactly the first of these, while the friends of religion see it as almost exactly the second.

You might also improve my provisional definition of 'religion' by pointing out that not all religions believe in *one* God. The Ancient Greeks, Romans and Vikings all believed in many gods, as do some Hindus today. (Their view is called **polytheism**, from the Greek *polu* 'many' and *theoi* 'gods'.)

Or again, you might improve my provisional definition of 'God' by pointing out that many people have believed in a God who is neither personal nor beyond the world. For instance, the philosopher Baruch Spinoza said that God was the same thing as *everything* – the whole of

Baruch Spinoza (1632–1677) is best known for his *Ethics*, written in the 1660s.

reality. (This view of God is called **pantheism**, from the Greek *pan* ‘everything’ and *theos* ‘God’.)

Also, you might point out that my provisional definition of ‘God’ won’t do, because it apparently implies **theism**. It seems to imply that God exists, because it defines God as ‘the supreme personal being *existing* beyond the world’. But surely, you might say, we can’t settle the question of God’s existence just by looking ‘God’ up in a dictionary! After all, many people don’t believe in God at all. (Their view is called **atheism**, from the Greek *a* ‘not’ and *theos* ‘God’.) And many other people don’t think that we can know one way or the other whether or not there is a God. (Their view is called **agnosticism**, from the Greek *a* ‘not’ and *gnōsis* ‘knowledge’.) So surely my definition should have said that ‘God’ means ‘the one supreme personal being who *is believed to exist* beyond the world’, or something like that.

Finally, one other possible drawback is that Buddhism seems to be a religion, but there are quite a lot of Buddhists who apparently don’t believe in God. You might think that this means that Buddhism, at least as practised by non-theistic Buddhists, isn’t really a religion. Or you might think that it proves my definition wrong. (Does it? My definition said that religion is about ‘belief in and worship of a supernatural power or God’ – and even non-theistic Buddhists apparently believe in some supernatural powers, such as karma.)

Despite these drawbacks, and possibly others, too, my two provisional definitions will do as a start, just to get us at least roughly straight about what we mean here by ‘God’ and ‘religion’. Quite often in philosophy, a definition is only a rough and ready starting-point – something to get thinking going, not something to close it down. In general, the more interesting things are, the harder they are to define. So I wouldn’t be very surprised if no completely satisfactory definition of religion was available.

If you want to find out more about these systems of belief, you could look them up in Oxford Reference Online, available through the Open University Library website.

My two provisional definitions do at least show us that philosophy of religion means asking philosophical questions *about* religion – about systems of belief in and worship of God such as Christianity, Islam, Hinduism, Judaism, Sikhism, Jainism, and the like. We should add that philosophy of religion also means asking philosophical questions about God (or about the gods).

So what are the philosophical questions that are worth asking about religion and God?

Questions about religion and God: a survey

Activity

Listen to the audio recording 'Introducing the philosophy of religion', which you can find on the website. In this recording, I introduce some of the themes of the book.

In the middle of what I say, you will hear a number of people whom we stopped in the street to ask them what big questions they had about God and religion.

If we'd asked *you* that question, what would you have said? Spend another five minutes writing down the questions that *you* most want to ask about religion and God. What are the burning issues, for you? (Be as frank as you like – no one else is going to see them!)

You should allow five minutes to listen to the recording 'Introducing the philosophy of religion' – but you may wish to listen to it more than once.

Discussion

Here are some of the questions about religion and God that you might have found yourself writing down. (Don't worry if you didn't come up with just these questions – there isn't a single *right* list here.)

- (A) Does religion only cause trouble in the world?
 - (B) Does God exist?
 - (C) Could the world exist if God didn't exist?
 - (D) If God is good, why is there so much evil in the world?
 - (E) Does religion depend on fear and brainwashing?
 - (F) Are all religious people hypocrites?
 - (G) Were Gandhi, Mother Teresa and Martin Luther King hypocrites?
 - (H) Can you be a good person without being religious?
 - (I) What difference does it make whether or not there is a God?
 - (J) Are all religions basically the same?
 - (K) Is religion something you can argue about, or just a matter of blind faith?
 - (L) Is the world designed? If so, does that mean it must have a designer?
 - (M) Can miracles happen?
 - (N) Can God be experienced?
-

When you were listening to the audio, you might have noticed that I say that some of the questions that we got from people in the street ‘aren’t philosophical questions’.

Philosophy is notoriously difficult to define but, in your study of Book 1, you will have begun to develop a feel for what is and what is not a philosophical question. What about the questions in the list (A – N), or the questions you’ve just written down yourself? Are all of these philosophical questions about religion, or some other sort of question – historical, perhaps, or biographical, or statistical, or something like that?

Activity

Using Table 1.1, try to decide how many of the questions above are philosophical questions. If you’re sure of your answer, put a tick in the relevant box. If you’re not so sure, jot down the reasons you see for answering one way or the other. But whatever you put, notice your reasons for putting it! Then add your own questions to the list.

Table 1.1 Philosophical and non-philosophical questions

	Question	Philosophical?	Not philosophical?
(A)	Does religion only cause trouble in the world?		
(B)	Does God exist?		
(C)	Could the world exist if God didn’t exist?		
(D)	If God is good, why is there so much evil in the world?		
(E)	Does religion depend on fear and brainwashing?		
(F)	Are all religious people hypocrites?		
(G)	Were Gandhi, Mother Teresa and Martin Luther King hypocrites?		
(H)	Can you be a good person without being religious?		
(I)	What difference does it make whether or not there is a God?		

(J)	Are all religions basically the same?		
(K)	Is religion something you can argue about, or just a matter of blind faith?		
(L)	Is the world designed? If so, does that mean it must have a designer?		
(M)	Can miracles happen?		
(N)	Can God be experienced?		

Discussion

What makes any question a philosophical question? Lots of different philosophers will say lots of different things here. My own response would be this: a question is philosophical when it is a question about our own or somebody else's world-view – about what really exists, about what we can know and how, about what is good or bad, right or wrong – and so on. (This vague ending 'and so on' is deliberate: there is a lot of overlap between philosophical questions and other sorts.)

I'd say that some of the questions identified above (A–N) are *clearly* philosophical questions. In this category are questions such as (B) 'Does God exist?', (C) 'Could the world exist if God didn't exist?' and (D) 'If God is good, why is there so much evil in the world?' I think these questions are clearly philosophical, by which I mean this: you have no hope of answering them well without doing some philosophy.

I think other questions in the list (A–N) are *clearly not* philosophical questions. Most obviously, question (G) 'Were Gandhi, Mother Teresa and Martin Luther King hypocrites?' is not a philosophical question. To answer (G), you don't need to do philosophy; you need to do some biographical research. You need to find out about the life stories of Gandhi, Mother Teresa and Martin Luther King (see Figure 1.3), and see whether they lived hypocritically, or whether, on the contrary, they sincerely tried to practise in private what they preached in public.

The same is true of the more general, but still not philosophical, question (F), 'Are all religious people hypocrites?'. To answer this question, what you need to do is a little dictionary work (what does



Figure 1.3 Gandhi (Unknown photographer. Photo: © AFP/Getty Images); Mother Teresa, photographed during the Pope's visit to the Philippines, 1981 (Photographed by Francois Lochon. Photo: © Francois Lochon/Time & Life Pictures/Getty Images); and Martin Luther King, Concord Baptist Church, New York, March 1956 (Unknown photographer. Photo: © Popperfoto/Getty Images).

'hypocrite' mean?) and then, once more, some biographical research. If you can find just one religious person who is *not* a hypocrite, then the answer to (F) is 'No'. This biographical exercise is not philosophy either. So (F) doesn't count as a philosophical question any more than (G) did.

Now consider question (E), 'Does religion depend on fear and brainwashing?' and question (H), 'Can you be a good person without being religious?'. Are these philosophical questions, or aren't they?

Well, think about the different ways we might go about answering (E) or (H). One way would be to set up a statistical survey. We could take a sample of 1000 religious people, and see whether their motivations to be religious arose from fear or brainwashing. Or we could take a sample of 1000 good people, and headcount how many of them go to church/mosque/synagogue/temple/gurdwara/etc. If we answer (E) or (H) by these statistical means, then we are not treating them as philosophical questions.

Alternatively, we might try to answer (E) or (H) by closely examining the concepts (or ideas) involved. We might argue that 'The very idea of religion has (or does not have) fear and brainwashing built into it', or that 'The very idea of being a good person is (or is not) a religious

idea'. When we argue in this idea-based (conceptual) way, we *are* arguing in a philosophical way. Running this sort of inquiry *is* doing philosophy.

The moral is that there are some questions which you can approach *either* philosophically, *or* in other ways. (You can also approach them in *both* ways.) As you will see, philosophy does have its own distinctive means and methods. One of its characteristic methods is careful, logical argument – but, of course, that happens in other subjects as well as philosophy. Another is the close examination of ideas or concepts – 'conceptual analysis', as it is often called. But there is more than this to philosophy. Philosophy is not just about concepts of things, but about the things themselves as well. Moreover, philosophy (fortunately!) does not exist in isolation from every other kind of inquiry. Often it is so closely connected with other kinds of inquiry that it is an open question whether what you are doing counts as philosophy or not. As I said above, there is quite a lot of overlap between philosophy and adjacent subjects such as psychology, sociology, politics, science and theology.

This is a good thing, not a bad thing. It is something to bear in mind as you work through this book. It's not a reason for thinking that the non-philosophical or less philosophical questions that we might raise about religion are uninteresting, or less interesting than the philosophical questions. But it is a reason – in a book about the *philosophy* of religion – for focusing on the philosophical questions about religion and God.

The content of this book

So, which philosophical questions about God and religion shall we consider here?

Obviously we can't cover every interesting question in the philosophy of religion, or even every question on philosophy of religion covered in the set book. There are just too many. In fact, we won't even try to cover every philosophical question in the list of questions (A–N) above!

This selectiveness is not a problem. We will learn a lot more about philosophy by looking closely and carefully at a few important questions, rather than rushing quickly past lots and lots of questions. Once we have learned what we can from looking selectively at just a few issues in the philosophy of religion, we can apply those lessons when we come to tackle other issues.

Still, we will be able to consider quite a few of the questions in my list. The most obvious question to begin with is probably (B), 'Does God

exist?'. So we shall turn to that question very soon, in the last section of this chapter. Discussing it will lead us to question (L), about **design**. Our discussion of design (Chapters 2 and 3) will then lead us to question (D), about why there is so much evil in the world, which will be our focus in the last section of Chapter 3. From there we shall move to the last two questions in the list (A–N), about miracles (Chapter 4, Section 4.2) and religious experience (Chapter 4, Section 4.3).

But there is another question that we should look at first. This is (K): 'Is religion something you can argue about, or just a matter of blind faith?'. We turn to this question in the next section.

1.2 Argument or blind faith?

In asking whether ‘religion is something that you can argue about’, I’m not asking whether it’s possible to have a conflict or a row about religion. All too obviously, that’s perfectly possible – history is full of such conflicts. What I’m asking is whether religion is something we can argue *philosophically* about. And in philosophy, **argument** doesn’t mean having a row or a conflict between different viewpoints. Philosophical argument is about giving **evidence**, perhaps even proofs, for your viewpoint – evidence or proofs that you hope others might be convinced by.

argument

In philosophy, an argument for a claim is a series of statements that somebody makes or might make, giving reasons to believe that claim.

evidence

Evidence for a claim means facts or experiences or arguments or other data that support a claim – the kind of things that someone might mention in a good argument for the claim.

So can there be successful philosophical arguments about God and religion? Here is a little dialogue between three people – Ada, Bert and Carl – who give different answers to this question. Which of them are you nearest to agreeing with?

ADA

Yes, there can be philosophical argument about God and religion. And the upshot of the philosophical arguments is to prove that God exists.

BERT

Yes, there can be philosophical argument about God and religion. And the upshot of the philosophical arguments is to prove that God doesn’t exist.

CARL

Well, one of you has got to be wrong! I think your arguments cancel out. There can’t be a proof of God’s existence such as Ada believes in,

when some people, like Bert for instance, are so sure that there's a proof of God's *non*-existence.

ADA

Wait a minute, Carl. You think that just because Bert disagrees with me about religion, I can't be right? And just because I disagree with Bert, *he* can't be right? But that's ridiculous. People might disagree about whether the earth is flat. In fact, they *do*! That doesn't mean that no one can be right about whether the earth is flat. Same with religion. Just because people disagree about religion, that doesn't mean that no one is right about religion.

BERT

Exactly. Just because Ada thinks there is a God, it doesn't mean there is one. Ada is the one who's the flat-earthier here.

CARL

But the thing is, if we were talking about whether the earth is flat, we could discuss the arguments. We could *prove* that the earth isn't flat, and that would be the end of the question. What happens with God and religion isn't like that. There aren't any proofs one way or the other. There aren't even any arguments.

ADA

No, there are arguments on both sides. I have arguments for believing in God, and Bert has arguments for not believing. It's just that my arguments are convincing, and Bert's aren't.

BERT

Well, they might convince you, but they shouldn't!

CARL

OK, so you do both offer arguments. But I don't think either of you believes what you believe *because* of your arguments. I think it's blind faith on both sides. Your arguments are just a pretence. They're an excuse for believing what you *want* to believe anyway. If you want a long word, they're a rationalisation!

ADA

Carl, I've spent years thinking about all this. I've been really careful and logical in examining the evidence. I believe in God because that's the position that the evidence supports. There's nothing *blind* about my faith! The fact is that, given the evidence, faith in God is the only reasonable position.

BERT

And I can say the same. I've spent years thinking about it, too, and I don't disbelieve in God just because I feel like it! I disbelieve in God because that's the position that the evidence supports. There's nothing blind about my *lack* of faith! The fact is that, given the evidence, disbelief in God is the only reasonable position.

Does any of this sound familiar? If you have ever listened to or taken part in an argument about whether God exists, it probably does. Lots of people (like Ada and Bert) advance arguments for and against God's existence, and many of them are clearly intelligent and reasonable people. But still we don't seem able to *settle* the arguments about God one way or the other. That leads many other intelligent and reasonable people to a conclusion like Carl's: there isn't any conclusive argument either for or against God's existence, and those who think they have found one, only think that because they want to believe it.

So who's right: Ada, Bert or Carl? You might well think that there is something to be said for all three views. Ada (you might say) has a point, because there are some things in the world that don't seem to make sense unless there is a God. Bert has a point for the opposite reason – because there are some things that don't seem to make sense if there *is* a God. Meanwhile Carl, too, must be right to point out that neither Ada nor Bert is being completely fair on the other, and that, sometimes at least, people are theists – or atheists – because that's what they *want* to believe.

On the other hand, you might say, both Ada and Bert go too far in talking about *proof*. There may be evidence for or against God's existence, but *proof* is a very strong word. If you have proof for a belief, that means the belief *must* be true, and surely (you might say) that is going too far with such a difficult question as God's existence. And Carl – you might add – goes too far as well. Just because neither Ada nor Bert can *prove* their beliefs, it doesn't follow that they don't have any evidence at all for them.

You might have different reactions from these, of course. Another possible reaction is to say that Ada is right to believe in God, but Carl is right to say that belief in God doesn't depend on reasons. Belief in God is good for us – it makes our lives go better than they do without belief – so we should believe in God even though we don't have very good evidence that he exists. This is the kind of view that has been

Blaise Pascal (1623–1662), French mathematician and philosopher.

William James (1842–1910), American psychologist and philosopher.

Friedrich Nietzsche (1844–1900), German philosopher and essayist.

Bertrand Russell (1872–1970), English philosopher, logician and anti-nuclear campaigner.

Søren Kierkegaard (1813–1855), Danish thinker interested in the nature of religious belief.

suggested by the seventeenth- and nineteenth-century philosophers Blaise Pascal and William James. Their view is often called **fideism** (from Latin *fides*, ‘faith’). If you want to explore this topic further, have a look at the extract from Pascal’s *Pensées* (1670) in the set book (Part VI, Reading 4, ‘The Wager’) and the extract from James’s *The Will to Believe and Other Essays in Popular Philosophy* (1897) (Part VI, Reading 9, ‘Reason, Passion and the Religious Hypothesis’).

Conversely, you might think that belief in God is *bad* for us, and conclude that we have good reason not to believe in God, whether or not we have good evidence that he doesn’t exist. This is the kind of view that you will find in the writings of Friedrich Nietzsche and the twentieth-century philosopher Bertrand Russell. If you want to explore such views further, see the extract from Nietzsche’s *Thus Spake Zarathustra* (1891) in the set book (Part XII, Reading 7, ‘The Death of God and the Ascendancy of the Will’) and the extract from Russell’s essay ‘A Free Man’s Worship’ (1903) (Part XII, Reading 8, ‘Idealism in a Godless Universe’).

Some people even think that there can’t be any real faith in God *unless* there is no evidence for God’s existence. Faith is essentially trust, and there can’t be trust unless there is something you don’t know: I can’t really *trust* that my daughter will recover from her illness, if I already know that she has recovered. Likewise with faith in God: we couldn’t have real faith in God if we *knew* that God existed. This is the strongly fideist view that the nineteenth-century philosopher Søren Kierkegaard takes in *Concluding Unscientific Postscript* (1846). If you want, you can read an extract from this in the set book, too (Part VI, Reading 8, ‘Faith and Subjectivity’).

Fideism has its critics, too. One possible problem for a fideism like Kierkegaard’s, James’s or Pascal’s comes from the question ‘Can you choose to believe?’ Fideists think that we should adopt a belief in God without much or any evidence that it is true. But we might wonder whether it is even possible to adopt a belief just because you choose to, rather than because there is good evidence for that belief.

Try it for yourself. Have a go at making yourself believe this:

Custard is really spaghetti

Can you do it? Well, you can certainly make yourself *have the thought* ‘Custard is really spaghetti’. But having a thought is not the same thing

as believing it. It seems impossible to make yourself *believe* ‘Custard is really spaghetti’, just by trying to believe it. So it’s hard to see how you will be able to make yourself believe that God exists, unless you think that there is good evidence that God exists.

Another problem for Kierkegaard’s kind of fideism is the worry that he muddles up two separate senses of the word ‘faith’. What do we mean by ‘faith’? We might mean (at least) two very different things. In one sense, ‘faith’ can mean belief in the propositions of religion (e.g. ‘God exists’, ‘God is loving’, ‘God created the world’, and so on). In the other sense, ‘faith’ means personal trust, of the kind that you have in friends or parents or a husband or wife. Maybe Kierkegaard is right about one kind of faith, faith as personal trust, but wrong about the other kind, faith as propositional belief. And maybe faith as personal trust can involve what Kierkegaard calls a ‘leap of faith’ – without that meaning that there can’t be evidence for or against faith as propositional belief.

Activity

Whatever we think about these further questions, it should be clear that the question of faith and reason is a big one. Philosophers and **theologians** (and others) continue to debate it. You can find one recent example of such a debate in the audio recording ‘Faith and reason’, which features the Christian priest and philosopher Keith Ward, the Muslim theologian Mona Siddiqui, the Jewish Rabbi Mark Goldsmith and the atheist philosopher Peter Cave talking to the interviewer Winifred Robinson about this very question.

You should listen to the recording all the way through before reading the questions below. When you have read them, listen to the recording again. This time you may find it helpful to stop and start the discussion to make a note of your responses as you go along.

So listen to ‘Faith and reason’ now. You can find this on the website.

Now ask yourself the following questions:

- 1 The three theists in the debate (especially Mark Goldsmith and Mona Siddiqui) seem to agree that accepting that God exists is only the beginning for religious belief. Do you agree with Peter Cave that this means that believers must *start* by taking what he calls ‘the great kangaroo leap of faith’? If this is so, why might it be thought to be a bad thing? *Hint:* Peter Cave indicates some reasons in the recording and you may be able to think of others. Even if you don’t think it is necessarily a bad thing, try to work out why others might think so.

The audio recording ‘Faith and reason’ lasts about fifteen minutes – but you will need to listen to it more than once. You should allow about forty-five minutes for this activity.

- 2 Mona Siddiqui and Keith Ward both say, in different ways, that there is a middle ground between 'conclusive proof' and 'blind faith'. Not everything can be proved conclusively. It doesn't follow that whatever is not conclusively proved is just accepted without question. But how much proof or evidence do you think we need in order to believe in God? *Hint:* Various views on this are suggested in the debate. Try to note them down and work out what might be said for or against them.
- 3 Notice that Winifred Robinson asks the three theists why, if there is one God, they don't agree about God. And all three of them – starting with Mark Goldsmith – reject the assumption in her question. They say that they do agree, because they all accept the existence of one and the same God. What do you think of this answer to Winifred's question?

Discussion

- 1 Keith Ward (at 8'07") responds to Peter Cave by suggesting that most people start off in life as believers in something divine beyond the material world, so if there is any 'kangaroo leap', it is in the opposite direction, away from faith. Does this match your experience? Whether or not you are a believer now, did you start off as a believer?

If you agree with Keith Ward's response, do you think it helps the case for theism? Peter Cave suggests that the trouble with 'the great kangaroo leap of faith', as he calls it, is that it's irreversible – once people have taken it, they are usually stuck with, and heavily committed to, their religious beliefs (5'50"). Is this true? Notice that Mona Siddiqui (from 6'39") and Mark Goldsmith (at 4'14") emphasise the struggle that many religious people have with their faith and their continuing journey to understand God.

- 2 At 2'52", Keith Ward mentions the name of W.K. Clifford, who in his essay 'The Ethics of Belief' (1877) famously said that 'It is wrong always, everywhere, and for anyone, to believe anything upon insufficient evidence.' Keith Ward suggests that 'sometimes we can and should believe a bit more than what our senses tell us'. Who do you agree with here? (Peter Cave clearly agrees with Clifford!)

On Cave's (and Clifford's) side: it seems irresponsible to go around making up your own beliefs. (Perhaps it's not even possible: remember the 'Custard is really spaghetti' example above.)

On Ward's (and James's) side: we need to ask just what belief is supported by what evidence. If I find that I can see something red and round in front of me, what does that justify me in believing?

- That there's an apple in front of me?
- Just that there is something red, round and apple-like in front of me?

William Kingdom
Clifford (1845–1879),
English mathematician
and philosopher.

You will explore these
issues further in
Book 4.

- Just that I am either hallucinating or seeing an apple?

We don't have a clear way of saying just how much is proved by any evidence. Without that, it isn't completely clear-cut what counts as going beyond what is proved by the evidence, either.

Keith Ward also takes up a distinction that Mona Siddiqui makes first in the discussion, and which Mark Goldsmith also seems to accept – a distinction between 'material evidence', evidence you can touch and see, perhaps, and 'spiritual evidence', of the sort that religious experience, for instance, might provide (3'20"). Is this a helpful distinction for this debate?

- 3 Winifred asks this question at 11'03". The three theists may believe in the same God, but they still disagree about what God is like, for instance about whether the Torah, the Qur'an, or the Christian Bible is the Holy Book that God has given us for guidance. You may have thought that there is a serious objection to theism here, which Peter Cave might have made more of (if he'd been given a chance). Or you may consider that the theists could retort to Peter Cave that, after all, atheists disagree, too.

When you have worked through this activity, please don't drop the question of faith and reason as one you don't have to think about any more! I hope you keep this question in view throughout the book. The arguments we will go on to consider should make a difference to what you think about the question 'Does God exist?' They should also help you think about whether there can be arguments for God's existence at all. Maybe, by the end of the book, you will have a different view about the question of faith and reason from the one you started with.

To see whether that does happen, it is time for us to look at some of the arguments for and against God's existence that might be offered. We'll begin to do that in the next section.

1.3 Collecting arguments for God's existence

What kind of evidence is there for God's existence? What kinds of arguments are available? (Remember the definitions of 'evidence' and 'argument' that we saw in Section 1.2.)

We'll begin with a 'brain-storming' survey, and try to collect up as many types of argument and evidence for or against God's existence as we can think of.

Activity

Start with yourself. Ask yourself this question, and think as hard and as honestly about it as you can.

What is my main reason for my current view about whether God exists or not?

Write down your answer to this question (or answers – there might be more than one). If possible, discuss your response with a friend, and ask that friend how he or she would answer it.

Discussion

What answers did you come up with? In Table 1.2 are some things that you, or your friend, might have said. Some of them, admittedly, are only things that you are likely to say if you realise you haven't thought all this through properly, and are being really honest about it.

Table 1.2 What is my main reason for my current view about whether God exists or not?

	If you believe that God exists (the theist view)	If you believe that God doesn't exist (the atheist view)	If you don't know whether God exists or not (the agnostic view)
(1)	I don't have any reasons. I just do think that.	I don't have any reasons. I just do think that.	I don't have any reasons. I just do think that.
(2)	I want God to exist.	I want God not to exist.	I don't care whether God exists or not.
(3)	Lots of clever people, or people whose authority I accept, think God exists.	Lots of clever people, or people whose authority I accept, think God doesn't exist.	Lots of clever people, or people whose authority I accept, don't know whether God exists.
(4)	I don't need <i>reasons</i> for thinking God exists. It's the other side who need reasons, for thinking he doesn't.	I don't need <i>reasons</i> for thinking God doesn't exist. It's the other side who need reasons, for thinking he does.	I don't need <i>reasons</i> for not claiming to know whether God exists. It's those who claim to know, theists or atheists, who need reasons.

Irrespective of whether it is used to support a theist, atheist or agnostic viewpoint – and irrespective of whether you yourself gave any of them – none of the four kinds of answer in Table 1.2 ought to impress you very much. But why not?

Activity

Pause to reflect on the answers in Table 1.2. Then in Table 1.3, write down a reason why each of the four kinds of answer is not very impressive.

Table 1.3 Problems with the answers in Table 1.2

	Answer	Problem
(1)	Having no reasons for your beliefs.	
(2)	Believing whatever you believe because you want to.	
(3)	Believing what you believe because clever people (or people whose authority you accept) believe it.	
(4)	Forcing the other side to prove their belief.	

Discussion

Here are some of the problems that I see with these kinds of answer.

- 1 *Having no reasons for your beliefs* creates obvious problems if we want to apply philosophy to assess those beliefs. (Compare some of the criticisms of fideism that we considered in Section 1.2.) If our beliefs don't depend on any reasons, it is very hard to argue philosophically either for or against them – because philosophical argument, as we have seen, is all about reasons and evidence.
- 2 *Believing whatever you believe because you want to* faces problems that we have also seen already. You can't just choose to believe that custard is really spaghetti, or that God exists. Besides, wanting something to be true is not enough to make it true, so that even if you could make yourself believe whatever you want, those beliefs would run the risk of being wildly inaccurate. Suppose Jane asks you what time the bus comes. 'Six o'clock,' you say. 'Why do you think it comes at six?' asks Jane. 'Because I *want* it to come at six o'clock,' you reply. Jane can reasonably infer from your answer that you don't know what time the bus is due.
- 3 *Believing whatever you believe because clever people (or people whose authority you accept) believe it* is also philosophically unsatisfactory. Of course it's not possible for each of us to investigate everything – we all have to take some things on trust. But borrowing others' opinions on everything is intellectual laziness. And it is risky, too, because even clever people and people in authority get things wrong. (Sometimes, the cleverer they are and the more authority they have, the more they get wrong.) Moreover, clever and authoritative

As you will see in Book 4, Chapter 1, the French philosopher René Descartes (1596–1650) chose to suspend belief in all opinions he held merely on the authority of others.

people reach different conclusions about all sorts of things; including – see line (3) of Table 1.2 – whether God exists or not.

- 4 The next line of answers to our question are the first answers that are remotely satisfactory. Forcing the other side of the argument to accept the **onus of proof**, instead of accepting the onus yourself, at least shows low cunning. The trouble is that the other side can pull the same trick: they can hit back with 'No, *I* don't have to prove anything, *you're* the one who has to prove what *you* believe.'

This can easily get a bit sterile. It is not very interesting, and not very fruitful, to just sit back and wait for a chance to catch your opponent out. Good philosophers are much more interested in understanding the world than in winning the argument. They are even prepared to risk *losing* the argument if, in the end, that will help them to understand the world better.

So here, in Table 1.4, are four more fruitful sorts of answer that you might also have given. All are more satisfactory than the first four, because they involve trying to find some evidence for our beliefs about God's existence or non-existence.

Table 1.4 Better arguments for and against God's existence

	Theist	Atheist	Agnostic
(5)	Personal experience shows that there is a God.	Personal experience shows that there is no God.	Personal experience shows neither that there is a God nor that there isn't.
(6)	History shows that there is a God.	History shows that there is no God.	History shows neither that there is a God nor that there isn't.
(7)	The way the world is shows that there is a God.	The way the world is shows that there is no God.	The way the world is shows neither that there is a God nor that there isn't.
(8)	The nature of the idea of God shows that there is a God.	The nature of the idea of God shows that there is no God.	The nature of the idea of God shows neither that there is a God nor that there isn't.

You should allow about twenty minutes for this activity.

Activity

Stop to think for a moment about these four kinds of argument (5–8) for or against God’s existence.

- If *you* were going to argue for (or against) God’s existence, which of these kinds of argument would you use (if any)?
- Which of these kinds of argument do you think provides the strongest evidence for (or against) God’s existence?
- Which of them is the weakest form of argument? Why?

Now try to put yourself in other people’s philosophical shoes. If you are an atheist, think your own position through first – and then try to imagine how the arguments look from a theist’s or an agnostic’s point of view. If you are a theist or an agnostic, do the same: when you have thought through your own position, try to work out how other people might argue differently.

Discussion

One thing that you will probably notice as you work through the arguments is this: you don’t have to take the same attitude (theist, atheist or agnostic) to all the arguments. Sometimes passionate theists (or atheists, or agnostics) think that they are committed to using every possible argument for their view, and that not to use them all would be ‘letting the side down’! But much subtler attitudes are possible, and indeed advisable. For instance, you can be a theist without thinking that the nature of the idea of God shows that there is a God. (Thomas Aquinas is an example of this combination of views.) Or again, you can be an atheist without thinking that atheism is proved by personal experience. (Probably most atheists do not think that.) In general, it doesn’t have to be that all the evidence points the same way.

Also, you may notice that evidence comes in different strengths. Table 1.4 only talks about arguments *showing* that God exists or doesn’t exist. But arguments often do rather less than *show* or *prove* things. Often they only *provide some reason for thinking* something, e.g. that God exists or doesn’t exist. Indeed sometimes they only *suggest* that something *may be* true, e.g. that God *might* exist or not exist.

You will read more about different possible strengths of arguments, when you consider the contrast between induction and deduction in Book 4, Chapter 2.

Theists have offered arguments – and atheists and agnostics have offered counter-arguments – under all four of the headings described in Table 1.4.

- Plenty of theists have argued (5) that they know God exists because they have personally experienced God.
- Most of the world's major religions claim (6) that we can know God exists because God has intervened at one point or another in human history.
- Most religions also argue (7) that we can know that God exists because we can know that God made the world (i.e. the whole universe).
- Finally (8) many theists have defended the argument that God's existence is something we can know about just by reflecting on the very idea or concept of God.

In this book we will look in varying levels of detail at arguments for and against God's existence which fit under nearly all of these headings. We will discuss arguments from (5), personal experience, and (6), history, in Chapter 4, and arguments from (7), 'The way the world is', in the remaining sections of this chapter as well as Chapters 2 and 3.

What we won't discuss in detail here are the arguments grouped under (8) – arguments that say that it follows from the concept of God that God exists (or doesn't exist). This sort of argument is called the **ontological argument**, and versions of it can be found in Anselm, Descartes and Leibniz, as well as in the work of some modern philosophers. We don't have space here to pursue this difficult, complex, and fascinating argument. If you are interested in learning more about it, you could have a look at the extract from Anselm's *Proslogion* (written in 1077–8) in the set book (Part VI, Reading 1, 'The Existence of God').

Arguments from 'The way the world is'

We now turn to arguments from 'The way the world is'. In Table 1.4, arguments for God's existence are collected together in this general form:

(7) The way the world is shows that there is a God.

However, under the general heading of (7), there are a number of different kinds of argument for God's existence that are worth distinguishing. When you think about (7), you may be able to pick out some of them. After all, there are lots of 'ways the world is' – so lots of arguments can be created by thinking about different ways.

One important ‘way the world is’ is this: the world seems to be *designed*. That is, the world has lots of features that look as if they are intentionally made to bring about particular good results. One of the most important arguments for God’s existence homes in on just this feature of the world. In very simple outline, it runs like this:

(7a) The detail of the world’s design shows that there is a God.

This is the classic **argument from design**. It is sometimes also called the argument *for* design, or **teleological argument** (from ‘teleology’, the study of design or purpose in nature). We shall look at it more closely in Chapters 2 and 3.

Another ‘way the world is’ is this: it exists! Many theists have argued:

(7b) The fact that the world exists shows that there is a God.

If you want to see how a contemporary philosopher, Derek Parfit, makes a lively case against cosmological arguments, see the extract from his paper ‘The Puzzle of Reality: Why Does the Universe Exist?’ (1992) in the set book (Part II, Reading 12, ‘Why is There Anything?’).

This argument arises from the classic question ‘Why is there something rather than nothing?’ It can seem amazing – perhaps it *should* seem amazing – to us that there even is a world. The mere fact of the world’s existence can look like it needs explaining. And it can look like the most natural explanation of the fact that the world exists is that God made it: ‘How can there be a creation unless there was a creator?’ This argument is what philosophers sometimes call the **cosmological argument** (from ‘cosmology’, the study of the origins of the universe). We won’t discuss (7b) any further in this book, but you should keep it in mind as a contrast to (7a) and (7c).

A further ‘way the world is’ is that it contains **orders of causes**. Some theists have focused on this third feature of the world and argued:

(7c) The existence of orders of causes in the world shows that there is a God.

Orders of causes are chains of events where one thing brings about another, and that in turn brings about something else. For example: a rock falls and starts a mudslide, and the mudslide blocks a river, and the blocked river creates a flood, and the flood makes the organisers of the village fete think, ‘We’d better cancel’, and that thought makes them cancel the village fete. We shall examine a version of this argument further below.

Arguments from 'The way the world is'

The general form of argument for theism which starts from 'The way the world is' can be written as:

- (7) The way the world is shows that there is a God.

Here are three ways of developing (7) into more specific arguments:

- (7a) The detail of the world's design shows that there is a God.

This is the argument from design, or teleological argument.

- (7b) The fact that the world exists shows that there is a God.

This is the cosmological argument.

- (7c) The existence of orders of causes in the world shows that there is a God.

This is known as **Aquinas's 'Second Way'**.

Aquinas's 'Second Way'

One version of (7c), the argument for God's existence from the orders of causes in the world, is given by Thomas Aquinas in a passage in his *Summa Theologiae* (1266–73). This is known as the 'Second Way' argument and is one of Aquinas's 'Five Ways' of proving God's existence. If you want to look at the context for this argument more closely, you can do so by reading the whole of Reading 2, 'The Five Proofs of God', in Part VI of the set book.

But that is optional. To understand Aquinas's argument in the 'Second Way', all we need to concentrate on is a single short passage. This can be found on p. 350 of the set book. I've reproduced it here, with some minor edits to make it more readable.

Who was Thomas Aquinas?



Figure 1.4 Joos van Gent and P. Berruguete, *Saint Thomas Aquinas*, c.1475, oil on panel. The Louvre, Paris. Photo: © The Louvre, Paris/The Bridgeman Art Library.

Thomas Aquinas (1225–1274) was an Italian priest of the Dominican Order, and an immensely influential philosopher and theologian, whose works present a synthesis of Christian and Aristotelian philosophy. In the Middle Ages he was the foremost proponent of the project of arguing for God's existence from the way the world is: his five arguments are known as Aquinas's 'Five Ways'. In Figure 1.4, Aquinas appears to be counting them. He is one of the very few philosophers to be canonised (the Catholic Church declared him a saint in 1324), and also one of the very few who still has self-described followers (known as Thomists, from his first name) today. His influence on Western philosophy remains considerable, for one thing because he was one of the main authorities that René Descartes was reacting against. The works for which he is best known are the *Summa Theologiae* (1266–73) and the *Summa Contra Gentiles* (1258–64), both of them huge compendia of arguments on almost every topic in philosophy and theology.

Activity

Read the following passage slowly and carefully. Take it a sentence at a time.

In the world that we perceive around us we find an order of causes. In each ordered series of causes, the first item is the cause of the next item, and this in turn is the cause of the final item (though there may be more than one intermediate step); and if any one cause is taken away, the effect will also be absent. Hence if there was not a first item in the series of causes, there will be no intermediate or final items. But if the series of causes stretches back to infinity, there will be no first cause, which will mean that there will be no final effect, and no intermediate causes, which is patently not the case. Hence it is necessary to posit some first cause; and this everyone calls 'God'.

(Aquinas, *Summa Theologiae*, First Part, Question 2, Article 3; set book, p. 350, with minor edits to help the reader)

To help you make sense of this passage, a picture or model might be useful. (Vivid pictures and models can be very important as ways of helping us to get hold of philosophical ideas.) So imagine that a very long row of dominoes is arranged in front of you from left to right – so long that you can't see either end of it. As you look at the dominoes, each one falls and tips over the next, starting somewhere on your left and heading towards your right.

In this picture, the reason why there are dominoes falling *now* has to be that, at some time in the past, some *first* domino fell. Unless the process had a beginning, it couldn't be running now.

This picture can help you to understand what Aquinas is saying, because Aquinas is making the same kind of point. Aquinas asks: 'Why is there an order of causes running in the world now?' His answer is: 'Because at some time in the past, some first cause got this order of causes going.' Something outside the whole series of possible causes and effects has to intervene, to turn those *possible* causes and effects into *actual* causes and effects. Unless there is such an intervener, nothing else will ever happen at all in the order of causes. But obviously, in our

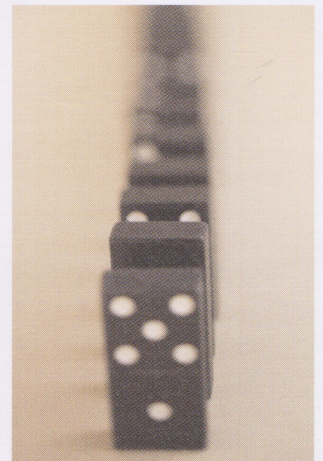


Figure 1.5 A row of dominoes. Photo: © Radius/photolibrary.com

world, lots of things do happen. So there is an intervener from outside. This intervener from outside, says Aquinas, is what ‘everyone calls “God”’.

Often in philosophy, it helps to write an argument out as a set of claims which we call **premises**, leading to another claim which we call the **conclusion**. The premises are claims which give us reason to think that the conclusion is true. Here is one well-known example:

PREMISE 1 All men are mortal.

PREMISE 2 Socrates is a man.

These two claims give us reason to think the following conclusion is true:

CONCLUSION Socrates is mortal.

This particular argument has two excellent traits, traits that all arguments ought to have. The first is that *all its premises are true* (if you ignore the fact that they are expressed in the present tense even though Socrates died long ago). The second is that the **inference** from its premises to its conclusions is a good one – or, as philosophers like to put it, the inference is **valid**. To say that an inference is valid is to say that it is *guaranteed to be truth-preserving*: if the premises of a valid inference are true, then this truth is bound to carry over to the conclusion. In the present example, the truth of the premises is indeed enough to guarantee that the conclusion is true. (To see this for yourself, try to imagine a world in which the two premises were true but in which the conclusion was false. You should find that such a world is impossible even to imagine.)

If an argument has the two desirable traits I have just described – i.e. all its premises are true and it is valid – then the argument is said to be **sound**. If it fails on either count – i.e. if it has one or more false premises, or if it contains an invalid inference – then it is **unsound**.

premise

A claim that supports, or is intended to support, the conclusion of an argument.

conclusion

The claim that the argument is intended to give us reason to accept.

valid

To say that an argument (or an inference within an argument) is valid is to say that it is guaranteed to be truth-preserving: if the premises are true, then this truth is bound to carry over to the conclusion.

sound

To say that an argument is sound is to say that it has two desirable properties: all its premises are true *and* it is valid.

Notice that sound arguments, i.e. arguments with *both* desirable traits, are bound to have true conclusions, since the truth of the premises will be carried over into the conclusion. Having just one of the desirable traits is not good enough. Having premises that are all true is no use if, because the argument is invalid, this truth is not carried over into the conclusion. Nor is being valid of any use by itself: if the premises aren't all true, there will be no truth to preserve, as the following example of a valid argument shows.

PREMISE 1	All philosophers are horses.
PREMISE 2	Socrates is a philosopher.
CONCLUSION	Socrates is a horse.

These notions (premise, conclusion, validity, soundness) are fundamental to presenting and evaluating arguments and, as you already know, arguments are fundamental to philosophy. In the next activity I will ask you to start putting them to work. You are likely to find doing so quite challenging at this stage, but you will have plenty of further opportunities to practise later in this book, and indeed throughout *Exploring philosophy*.

Activity

Have a look back at the passage from Aquinas. Can you see anything like the structure of the argument described above? Try to identify the

premises and conclusion and fill in Table 1.4. Then ask yourself: Do you think this is a good argument?

Table 1.5 Finding the shape of Aquinas's argument

Premise 1	
Premise 2	
Conclusion	

Discussion

The shape of the argument

Despite the complexities of Aquinas's argument, we can represent its basic moves in a simple form.

PREMISE 1	If there is no <i>first</i> item in an order of causes, there can be no <i>other</i> items after it (no intermediate causes, and no final effects).
PREMISE 2	In the order of causes which is the world, there obviously are intermediate causes and final effects.
CONCLUSION	So the world must have had a first cause, and this everyone calls 'God'. (From Premise 1 and Premise 2.)

If you look again at the end of the passage from Aquinas quoted above, you should be able to see this argument there, almost word for word. So this simple argument seems a fair representation of what Aquinas was getting at.

'An order of causes', remember, is a sequence in which one thing brings about another, and that in turn brings about something else. The world is like that, says Aquinas: it contains an order of causes.

So how does that fact get us any nearer establishing God's existence? Aquinas answers: because the order of causes has to start somewhere. If there is no first cause, there won't be any subsequent causes or effects. As with the dominoes mentioned above, something outside the order of causes must get it going in the first place.

Evaluating the argument

Do you think this argument of Aquinas's for God's existence is a good one? Here are the three main questions about the argument that occur to me:

- 1 Why does the first cause have to be God?
- 2 If we need God to explain the existence of the world, then don't we need something to explain the existence of God?
- 3 Why couldn't an order of causes have no start, but stretch on back through time to infinity?

I will now offer some comments on each of these questions in turn. In each case, I will expand on the worry that the question expresses, and then suggest how that worry might be met.

1 Why does the first cause have to be God?

Here it's worth remembering my dictionary-style definition of 'God' given at the beginning of this chapter: 'the supreme personal being existing beyond the world, creator and ruler of the universe'. Does Aquinas think that he's shown, just by the argument that I outline above, that the first cause which gets going the world's order of causes is bound to be God, rather than, say, Mickey Mouse?

The answer to this question (though you can't tell this just from the extract above) is 'no, he doesn't'. Aquinas is not trying to prove that the first cause of all the other causes is what 'everyone calls "God"' (and not, for example, what 'everyone calls Mickey Mouse'). He would agree that we need separate arguments to prove this (and elsewhere in his works, he tries to provide them). Aquinas's argument here is intended simply to direct our thinking to the idea of something, or someone, that explains the world's existence. The 'Second Way' is not supposed to prove, all on its own, that God is omnipotent, omniscient, and has all the other qualities that Aquinas and other Christians believe he has.

2 If we need God to explain the existence of the world, then don't we need something else to explain the existence of God?

The answer to this is simple: no, because Aquinas's argument is not an attempt 'to explain the existence of the world'. Aquinas is not presenting a cosmological argument here (that is, an argument of the (7b) kind, which deduces God's existence just from the world's

existence). Rather, Aquinas is looking for an explanation of a specific feature of what exists in the world, namely the order of causes. His argument is that there can't be an order of causes in the world unless something outside the world got the order of causes going in the first place. We won't need an explanation of the same sort for what Aquinas calls 'God' unless this God is also an order of causes. But Aquinas does not think that God is such an order of causes.

This question would be a good criticism, if Aquinas's argument was a form of the cosmological argument (7b) which asks, 'Why is there something rather than nothing?' But that is not Aquinas's argument, so this question does not apply to it.

3 Why couldn't an order of causes have no start, but go backwards all the way to infinity?

Aquinas argues that there can't be an order of causes that doesn't begin somewhere. To use the model I've suggested, the row of dominoes can't stretch back into infinity without any beginning. If there are to be any subsequent domino-falls, there must be a first domino-fall. Something outside the series of domino-falls has to act on the row of standing dominoes to get them to start falling in the first place. Just likewise, says Aquinas, something outside the order of causes that we see in the world has to act on them to get them going. As we saw, Aquinas thinks that this outside intervener is God.

So what about this claim that the order of causes must be started by the intervention of something outside it? The trouble with this claim, it seems to me, is not that we have reason to think that it's false. It's rather that we don't have any good reason to think that it's true or false. We can know – at least I think we can! – that there couldn't be a series of falling dominoes without a first falling domino. But how can we possibly generalise from that simple case, which just concerns one simple sort of cause–effect relation, to a conclusion about the whole causal order? In the words of the eighteenth-century thinker David Hume:

When we look beyond human affairs and the properties of the surrounding bodies: when we carry our speculations into the two eternities, before and after the present state of things; into the creation and formation of the universe; the existence and properties of spirits; the powers and operations of one universal spirit, existing without beginning and without end; omnipotent,

You have already encountered the writings of David Hume in Book 1, Chapter 3.

omniscient, immutable, infinite, and incomprehensible: we must be ... apprehensive, that we have here got quite beyond the reach of our faculties.

(Hume, 1990 [1779], p. 45)

So it's very hard to tell whether Aquinas is right that the order of causes must have a beginning outside itself. And that suggests an answer to our earlier question whether this argument of Aquinas for God's existence is a good one. Take a moment to think again about how you would answer that.

I think the answer has to be that, at any rate, Aquinas's argument can't make us *sure* that God exists. For his argument to give us certainty about God's existence, we would have to be certain that the order of causes that we see in the world cannot stretch back to infinity, but must have had a beginning. But apparently, we can't be certain of that. This uncertainty about one of the argument's premises transmits to its conclusion.

This completes our discussion of 'Aquinas's Second Way'.

Summary

In this chapter we have thought about the meaning of the words ‘God’ and ‘religion’, and asked what the main questions are in the philosophy of religion, and which of them most interest us. This should have helped you get a sense of the place of definitions in philosophy, and helped you to distinguish questions that are genuinely philosophical from questions that are not (though, of course, they may be interesting for plenty of other reasons). We have done some work on the important exercise of thinking about how philosophical arguments can be made for views we don’t ourselves accept. And we have introduced the notions of evidence and proof, and asked whether and how far they apply to religion.

We have looked at a variety of possible arguments for God’s existence, including Aquinas’s ‘Second Way’. We have seen how his argument differs from various other forms of argument for God’s existence from ‘The way the world is’, such as the cosmological argument and the argument from design, and we have learned how arguments from ‘The way the world is’ are only one variety among several possible forms of argument for God’s existence.

The most important skill addressed in this chapter is that of identifying an argument in a piece of prose (in this case written by Aquinas) and then representing that argument in the form of premises and a conclusion. You have also seen how representing an argument this way can help us to assess the argument more readily: first, by asking whether the premises are true, and second, by asking whether the inference from the premises to the conclusion is a good, or valid, one.

You will see another example of this way of presenting and assessing arguments in the next chapter, as we turn to the kind of argument for God’s existence that, in Section 1.3 above, I labelled (7a): the argument from design, or the teleological argument.

Activity

As a final activity for this chapter, have a go at the quiz on the *Exploring philosophy* website.

References

Carroll, L. (1978 [1871]) *Through the Looking-Glass*, London, Galaxy Books.

Hume, D. (1990 [1779]) *Dialogues concerning Natural Religion* (ed. M. Bell), London, Penguin Classics.

Chapter 2

The classic argument from
design: Cleanthes and Paley

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Aims

By the end of this chapter you should:

- have a reasonably confident grasp of what is going on in an extended piece of philosophical writing – a crucial section of David Hume's *Dialogues concerning Natural Religion*
- understand the argument from design as Cleanthes presents it in Hume's text, and be able to assess its merits
- understand criticisms of the argument from design that Philo presents in Hume's text, and be able to assess their merits
- have developed an understanding and assessment of the argument from design as Paley presents it, and of the criticisms that can be offered of Paley's argument, especially from an evolutionary point of view.

Materials you will need

In this chapter, you will need to refer to the following reading in the set book:

- Part VI, Reading 6, 'The Argument from Design: David Hume, *Dialogues concerning Natural Religion*'.

You will need to listen to the following audio recording (available on the *Exploring philosophy* website):

- Hume on design.

You will also be directed to the website for an end-of-chapter quiz.

2.1 Introduction

We saw in Chapter 1 that there are different methods of arguing from ‘The way the world is’ to the existence of God, and examined one way of doing this – Aquinas’s ‘Second Way’.

Another way of arguing for God’s existence begins from the design (real or apparent) that we see all around us in the world. Arguments of this sort are examples of the argument from design, or teleological argument, for God’s existence. It is the argument from design, in two different ‘classic’ versions from the eighteenth and nineteenth centuries, that we shall focus on in this chapter. After that, in Chapter 3, we will look at some more recent versions of the argument from design, together with a problem – the **problem of evil** – that arises for all versions of the argument.

We will begin with a longer reading exercise than we have had so far: an extract from the writings of a philosopher who has already featured at the end of Chapter 1, David Hume.

Table 2.1 Hume on design (i)

Time reference	Question	Answer

2.2 The classic argument from design, first version: Cleanthes

A classic statement of the argument from design is given by Hume's character Cleanthes, one of three characters whom Hume depicts in conversation in his *Dialogues concerning Natural Religion* (published posthumously in 1779). The other two characters are Philo, who is mostly (but not always) the mouthpiece for Hume's own agnostic views, and Demea, who like Cleanthes believes in God, but unlike Cleanthes refuses to argue for his beliefs by appealing to design in the world. Demea has much less to say than Hume's other two characters.

Activity

The audio recording 'Hume on design' lasts about ten minutes – but you will need to listen to it more than once. You should allow about thirty minutes for this activity.

As an introduction to your study of Hume's critique of the argument from design, listen to the audio recording 'Hume on design', which you will find on the website.

In this interview with the leading Hume scholar Peter Kail, a number of issues are raised about Hume and the argument from design, in what I hope is a friendly and approachable way.

As you listen, note down what questions are raised, along with any possible answers (your own or Peter Kail's) to those questions. You may find it helpful to note down the timings in the recording where particular questions are raised or answered. You could use Table 2.1 to do this.

Table 2.1 Hume on design (1)

Time reference	Question	Answer

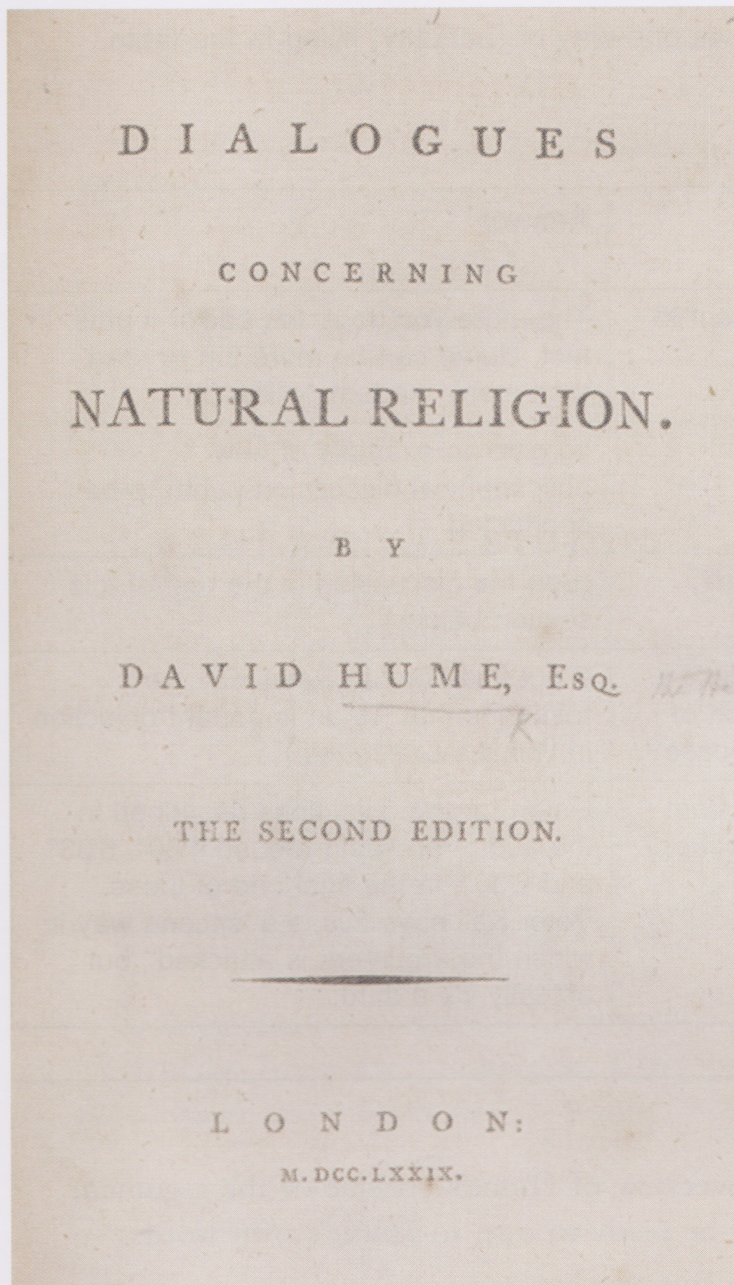


Figure 2.1 Frontispiece from David Hume, *Dialogues concerning Natural Religion*, 1779, London. British Library, London 8468.d.6.(2). Photo: © British Library Board. All rights reserved.

Discussion

Of course, until you've finished this chapter you probably won't be ready to fill in this table with definitive responses – especially not in the third column, where you list the answers to the questions that are raised. So treat this activity as a warm up and a way of focusing your thoughts; you could come back to it as you work through the chapter. Remember, too, that there is more than one way of dividing up a conversation to say what questions it raises and what answers it gives.

That said, Table 2.2 shows one way of (partially) filling in the table.

Table 2.2 Hume on design (2)

Time reference	Question	Answer
0'15"–0'50"	How easy is it for a modern student to read Hume?	The more you do it, the easier it gets. In fact, Hume can be more fun to read than many modern philosophers.
0'55–1'20"	Why did Hume write dialogues?	To give an example of how philosophical discussion ought to be conducted.
from 1'25"	What is the argument from design?	(See the discussion in the rest of this section below.)
2'50"–4'15"	Can't any kind of effect have various causes, so we can't be sure which of them is responsible in any given case?	(I put this point to Peter Kail; he responds that it's an important objection in Hume's <i>Dialogues</i> .)
from 4'15"	What objections to the argument from design are made in Hume's <i>Dialogues</i> ?	Listen for the objections described in the audio recording around 4'30", 5'33" and 6'30". In the final one of these, Peter Kail says this is a 'second way in which the argument is attacked', but actually it's a third.

Now that you have an overview of Hume's critique of the argument from design, you should be ready to turn to Hume's own words.

Activity

Skim reading can be a good way to make your first approach to a sustained piece of philosophical writing. By skim reading I mean running your eyes quickly over a text, taking on board what you can get out of it immediately, and not worrying too much about the things that don't make immediate sense.

So first, skim the whole of Reading 6, 'The Argument from Design', in Part VI of the set book, where Cleanthes presents his version of the argument from design, and engages in debate about it with Philo. This shouldn't take you too long: the passage's total length is less than six pages, and as I say, a skim reading means a quick reading.

Now read the passage a second time. This time around read more carefully and slowly. Try to make sure you are reading *actively* – not just soaking the passage up like a sponge, but asking (and trying to answer) specific questions about it as you read.

For example, you might ask yourself:

- Is there one key paragraph where the core argument from design is presented?
- Who is the main person to argue against Cleanthes?
- Where does Cleanthes' opponent offer distinct objections?
- What are these objections?

There is no discussion for this activity but you will find that it prepares you for working through the arguments in the passage in detail, which we will do together over the next few pages.

Let's start by asking whether there is one key paragraph where the core argument from design is presented. The answer is that Cleanthes' main presentation of the argument from design comes right at the beginning of the reading. Here's the key passage:

Look round the world, contemplate the whole and every part of it: you will find it to be nothing but one great machine, subdivided into an infinite number of lesser machines, which again admit of subdivisions to a degree beyond what human senses and faculties can trace and explain. All these various machines, and even their most minute parts, are adjusted to each other with an accuracy which ravishes into admiration all men who have ever contemplated them. The curious adapting of means to ends, throughout all nature, resembles exactly, though it much exceeds, the productions of human contrivance, of human designing, thought, wisdom, and intelligence. Since therefore the effects resemble each other, we are led to infer by all the rules of analogy, that the causes also resemble, and that the Author of Nature is somewhat similar to the mind of man, though possessed of much larger faculties, proportioned to the grandeur of the work which he has executed.

(Hume (1779), in set book, pp. 365–6)

Notice that this quotation is from the set book, in which Hume's punctuation has been modernised. You can get a sense of the original eighteenth-century punctuation by comparing this with the passage quoted at the end of the last chapter.

For the next couple of pages, we are going to focus in very closely on this short passage from Hume. We will then turn back to the rest of the reading.

Activity

An important part of analysing an argument is to identify, first, the conclusion, and then the **assumptions** made by the author to support that conclusion.

To give you practice at doing this, read the extract above one more time. Try to find and then state in your own words:

- Cleanthes' conclusion
- the assumptions Cleanthes makes in order to support this conclusion.

Discussion

The conclusion is found in the final sentence. As I would put it: 'The natural world was caused to exist by an intelligent designer, namely God.'

The assumptions Cleanthes makes are these:

- that the natural world is a highly complex system, accurately suited to bringing about particular outcomes
- that certain humanly created objects are highly complex systems, accurately suited to bringing about particular outcomes
- that where two things ('effects') resemble each other, so do their causes
- that humanly created objects are caused to exist by intelligent beings.

You will almost certainly not have come up with these exact assumptions. Given this, you may come up with a different understanding of the argument from the one that I am about to present and discuss. If you have time, you may want to try to reconstruct and evaluate the argument using your version of Cleanthes' assumptions. In the meantime, just follow my version.

Why do the assumptions Cleanthes makes allow him to draw the conclusion he does? We can answer this by treating each assumption as a numbered premise, and writing out what Cleanthes says as a formal argument. The formal argument that we are now going to sketch out will have the same kind of structure as we found in Aquinas's argument in Chapter 1, Section 1.3. This argument is a little more complex, so

this time we will go a little more deeply into how such arguments work, and how to understand them.

Presenting Cleanthes' argument formally

We have already identified some assumptions as premises for our argument. These can be used to make inferences to other claims, which (here going beyond what we did in our treatment of Aquinas's argument) we can call **subconclusions**. These subconclusions are then combined with further premises, to get us ultimately to the argument's main conclusion.

So we can represent Cleanthes' argument as follows:

PREMISE 1	The natural world is a highly organised system, accurately suited to bringing about particular outcomes.
PREMISE 2	Certain humanly created objects are highly complex systems, accurately suited to bringing about particular outcomes.
SUBCONCLUSION 1	Therefore the natural world resembles certain humanly created objects (inferred from Premises 1 and 2).
PREMISE 3	Where two things ('effects') resemble each other, so do their causes.
SUBCONCLUSION 2	Therefore the cause of the natural world resembles the cause of these humanly created objects (inferred from Premise 3 and Subconclusion 1).
PREMISE 4	Humanly created objects are caused to exist by intelligent designers (i.e. their human creators).
MAIN CONCLUSION	Therefore the natural world was caused to exist by an intelligent designer, namely God (inferred from Premise 4 and Subconclusion 2).

This may look daunting at first, but don't panic: take it slowly. Start at the top. The first two steps, Premises 1 and 2, are word-for-word repetitions of two of the four assumptions I suggested Cleanthes was making. After this comes a new claim, Subconclusion 1: 'Therefore the natural world resembles certain humanly created objects'. The word

‘therefore’ indicates that this is an inference from assumptions already made, not a new premise. In other words, it is a kind of conclusion. But because it is not the main conclusion (which is at the very end), it is called a subconclusion.

Activity

Look at Subconclusion 1. Does it seem to you to follow from Premises 1 and 2? (In other words, would the truth of Premises 1 and 2 be enough to guarantee the truth of Subconclusion 1?)

Discussion

Yes, the truth of Premises 1 and 2 would indeed be enough to guarantee the truth of Subconclusion 1. It is impossible even to imagine Premises 1 and 2 being true without Subconclusion 1 being true. As you can also say, the inference is *valid*.

Next comes Premise 3, which is simply the third of Cleanthes’ assumptions (as I represented them). But this new premise can be combined with the preceding Subconclusion 1 to draw Subconclusion 2 (‘Therefore the cause of the natural world resembles the cause of these humanly created objects’).

Activity

Does Subconclusion 2 seem to you to follow from Subconclusion 1 and Premise 3, as Cleanthes supposes? (In other words, would the truth of Subconclusion 1 and Premise 3 be enough to guarantee the truth of Subconclusion 2?)

Discussion

Yes, this is a valid inference, too.

To get from Subconclusion 2 to the main conclusion, Cleanthes uses Premise 4. Is this a third valid inference? Think carefully about that!

Representing an argument in this way is quite exhaustive. It may also be quite *exhausting*, especially when you’re just learning to do it. However, it will be incredibly useful when we turn to evaluating the argument. I will come to this shortly. But first, I want you to think about whether

my presentation of Cleanthes' argument is an accurate representation of what is actually there in Hume's text. After all, there is no point in evaluating the four-premise argument above if it does not correspond to the argument that Cleanthes was actually advancing.

Activity

For each step of the argument, try to find a sentence or phrase that corresponds to it in the extract from the reading quoted above.

Discussion

Here is my attempt to match my version of Cleanthes' argument to Hume's text.

Table 2.3 Cleanthes' argument

Premise 1	[The natural world is] nothing but one great machine, subdivided into an infinite number of lesser machines. All these various machines, and even their most minute parts, are adjusted to each other with an accuracy which ravishes into admiration all men who have ever contemplated [their] curious adapting of means to ends ...
Premise 2 and Subconclusion 1	The curious adapting of means to ends, throughout all nature, resembles exactly, though it much exceeds, the productions of human contrivance.
Premise 3 and Subconclusion 2	Since therefore the effects resemble each other, we are led to infer by all the rules of analogy, that the causes also resemble.
Premise 4	[T]he productions of human contrivance [are created through] human designing, thought, wisdom, and intelligence.
Main conclusion	[T]he Author of Nature is somewhat similar to the mind of man, though possessed of much larger faculties, proportioned to the grandeur of the work which he has executed. By this argument ... alone, do we prove at once the existence of a deity and his similarity to human mind and intelligence.

One thing to notice here is that some of the steps I have identified as separate are not separated out by Hume: look at the boxes marked as 'Premise 1 and Subconclusion 2' and 'Premise 3 and Subconclusion 2'.

This happens sometimes when you try to give an argument a formal representation. The opposite can happen, too: you can find that an author distinguishes two steps as separate, when in a formal representation of the argument, they turn out to be the *same* step, expressed in different ways. This isn't something to worry about – but it is something to notice.

Apart from that, it looks as if I have succeeded in representing Cleanthes' argument fairly closely. If so, this is good news. It also looks as if Cleanthes is arguing fairly explicitly: he hasn't left any of these argument-steps implicit or tacit. If so, this is good news, too – it is very often the unstated, implicit or tacit assumptions that make the most trouble for an argument.

Evaluating Cleanthes' argument

We can turn now to the evaluation of the argument. We should begin to reap the rewards of the effort we have put in to representing Cleanthes' argument in this very explicit format, as each premise and inference can be taken in its turn. If every premise in the argument is true, and every inference in it is valid, then the argument overall is sound, and we must accept the main conclusion. If any of the premises are false, or any of the inferences invalid, then the argument needs to be rejected, or at the very least revised in some way.

Activity

You should allow about thirty minutes for this activity.

Go through the steps in the order in which I have outlined them above. Stop to think for yourself about each step and use Table 2.4 to record your thoughts.

When the step you are looking at is a premise, aim particularly to answer the question 'Is this true?' When the step you are looking at is a conclusion or subconclusion, aim particularly to answer the question 'Is the inference to it valid?'

Make your own comments *before* you go on to read my comments. Then, when you've done this, look to see how yours compare with mine. What have you missed in your comments? And what have I missed in mine?

As you go through this activity, you will need to keep in mind what the Big Picture is, as well as focusing on the detail that makes up this Big Picture. This ability to 'zoom in' on particular details, as well as remembering the overall story into which the details fit, is another important skill to work on when you are reading philosophy.

Table 2.4 Evaluation of Cleanthes' argument

	Your comments
Premise 1	
Premise 2	
Subconclusion 1	
Premise 3	
Subconclusion 2	
Premise 4	
Main conclusion	

Premise 1: The natural world is a highly organised system, accurately suited to bringing about particular outcomes.

What did you think about the first premise? I would say that it should be taken in two halves: (a) the claim that 'The natural world is a highly organised system', and (b) the claim that this system is 'accurately suited to bringing about particular outcomes'.

Taking (a) first, we can certainly say that the natural world is a highly organised system. But would it be any less true to say that 'the natural world is a deeply chaotic place'? Look at some parts of the natural world – a colony of ants, say, or the interactions that keep a rain forest going, or echolocation in bats – and you can only be impressed by the extraordinary complexity and organisation that they display. Look at other parts of the natural world – a volcanic eruption, perhaps, or the deposition of stones on a beach by a tide – and you will still see *some* sorts of complexity and organisation. But you will also see a great deal of very striking randomness and disorder.

Astronomy tells us that the greatest proportion by far of the universe is simply empty space with nothing in it. How complex or ordered is that?

On balance, perhaps we should only conclude that the natural world is highly organised in *some* ways, but not in others. But let's suppose for now that this gives Cleanthes enough of a basis for his argument, and proceed.

Let's turn to (b), the claim that the system of the world is 'accurately suited to bringing about particular outcomes'. Again, this is true, but only part of the picture. Particular bits of the living world do indeed aim with the greatest accuracy at particular purposes. Echolocation aims at enabling bats to find their way around, and it is an extremely effective means for bats to do just that. Certain species of fungus that grow on trees serve the function of protecting those trees from bacterial attack – and they are so good at this that humans have learned to use those fungi as 'antibiotics', in order to defend themselves from the same or similar bacteria.

However, there are parts of the natural world which, many would say, are not well designed at all. Some people say the human knee is a fairly primitive piece of engineering, with obvious design flaws. (At least two of the authors of *Exploring philosophy* have a medical history of knee trouble!) Also, there are many instances of design, or apparent design anyway, that are far from benevolent from a human point of view. Tigers, killer whales, and polar bears, to the extent that they are designed, are stunningly well designed for killing and eating their natural prey species – which sets them up very nicely to eat the occasional human, too. The tapeworm is adapted perfectly to infesting human intestines, causing disease, malnutrition and death. The Ebola virus is very good at killing people. And so on. If cases like these show us a God at work, he does not seem to be a very human-friendly God.

As many have observed – most famously the nineteenth-century hymn-writer Mrs C.F. Alexander – there is a lot of strikingly effective design apparent in nature. On the other hand, as the comedy group Monty Python more recently noted, this is not always something to be pleased about.

Good design ...

All things bright and beautiful,
All creatures great and small,
All things wise and wonderful,
The Lord God made them all.

Each little flower that opens,
Each little bird that sings,
He made their glowing colours,
He made their tiny wings.

The purple-headed mountain,
The river running by,
The sunset and the morning,
That brightens up the sky.

The cold wind in the winter,
The pleasant summer sun,
The ripe fruits in the garden,
He made them every one.

He gave us eyes to see them,
And lips that we might tell
How great is God Almighty,
Who has made all things well.

C.F. Alexander (1899 [1865])

and bad design

All things dull and ugly,
all creatures short and squat,
all things rude and nasty,
the Lord God made the lot.

Each little snake that poisons,
each little wasp that stings,
he made their brutish venom,
he made their horrid wings.

All things sick and cancerous,
all evil great and small,
all things foul and dangerous,
the Lord God made them all.

Each nasty little hornet,
each beastly little squid;
who made the spiny urchin?
Who made the sharks? He did!

All things scabbed and ulcerous,
all pox both great and small,
putrid, foul, and gangrenous,
the Lord God made them all.

Monty Python (1980)

Here we touch on the problem of evil, the question why a perfectly good God would make a world that is not perfectly good.

A further point about design in the world, separate from the problem of evil, is this. While *particular* bits of the natural world are very efficient means to *particular* ends, this is not to say that the whole natural world, taken together, is a *single* means to any *single* end. If the argument from design cannot show that the natural world has any one overall end, then it looks likely to fail.

Can Cleanthes, or other proponents of the argument from design, fix these problems for the argument by being more specific about exactly what sort of design in the world they see as evidence for God? Perhaps

For more on the problem of evil, see Section 3.4 in Chapter 3.

he can; I'll come back to this question in Section 2.2. For now, let's move on to the next step in the argument.

Premise 2: Certain humanly created objects are highly complex systems, accurately suited to bringing about particular outcomes.

What did you jot down about this? My comment was that it is clearly true. No one need dispute it. (The book you currently have in your hands is an obvious example.)

Subconclusion 1: Therefore the natural world resembles certain humanly created objects.

This step of Cleanthes' argument, too, is one that we can just accept. It follows from Premises 1 and 2, and it also looks true in its own right. There is indeed *some* sort of resemblance between human design and design in nature. The question is what follows from this resemblance.

Premise 3: Where two things ('effects') resemble each other, so do their causes.

Philo doubts this premise. His objection to this step in Cleanthes' argument is quite subtle, and needs a little careful unpicking. I'll state his central point in his own words, which you should now take some time to re-read carefully:

That a stone will fall, that fire will burn, that the earth has solidity, we have observed a thousand and a thousand times; and when any new instance of this nature is presented, we draw without hesitation the accustomed inference. The exact similarity of the cases gives us a perfect assurance of a similar event and a stronger evidence is never desired nor sought after. But wherever you depart, in the least, from the similarity of the cases, you diminish proportionately the evidence and may at last bring it to a very weak *analogy* which is confessedly liable to error and uncertainty.

(Hume (1779), in set book, p. 366)

Dropped plates break; hot water scalds; struck matches burn. In normal cases, we have thousands of exactly similar cases where we have already seen some type of cause reliably produce the same type of effect. This means that, given the cause ('you've dropped another plate'), we can predict the effect ('it will break, too'). It also means that, given the

effect, we can work backwards to the cause: 'if the plate is broken, that's probably because it was dropped'; 'if the match is burning, that's probably because it was struck'.

But now suppose you tell me that you have seen something *a bit like* a broken plate or a burnt match. What cause can I reasonably infer from this effect? Philo says that 'wherever you depart, in the least, from the similarity of the cases, you diminish proportionately the evidence'. His point is that if the universe is *only a bit* like a house that someone has designed, then we have *only some* reason to think that it must have a designer.

Or suppose that you have only seen a dropped plate break *once*, not dozens or hundreds of times. Philo says this:

When two *species* of objects have always been observed to be conjoined together, I can *infer*, by custom, the evidence of one whenever I see the existence of the other; and this I call an argument from experience. But how this argument can have place, where the objects, as in the present case, are single, individual, without parallel, or specific resemblance, may be difficult to explain ... To ascertain this reasoning, it were requisite that we had experience of the origin of worlds.

(Hume (1779), in set book, p. 369)

If you have only ever seen one smashed plate or burnt match, you can't be as sure that the plate must have been dropped, or the match struck, as most people can – because most people have seen lots of plates dropped and matches struck. Where we haven't seen lots and lots of cases of the same cause followed by the same effect, we can't be very confident about deducing the cause from the effect. But how many universes have we seen? Just one, obviously. And equally obviously, we didn't see it start! So we can't have very much confidence at all about what the causes of the universe might be.

Thus Philo's objection to Premise 3 is twofold. Where we have seen (a) *hundreds or thousands* of cases in which (b) *exactly similar* effects come from exactly similar causes, we can be very confident, in a new case, about deducing the cause from the effect. But this isn't how it is with the world: (a) there is only one case of the creation of the world – which nobody saw – and (b) the only things we can compare it to are not at all similar to it. So, our confidence in Premise 3 should be very

low – as should the use to which Cleanthes puts it in the inferences that follow.

Subconclusion 2: Therefore the cause of the natural world resembles the cause of these humanly created objects.

This subconclusion does seem to follow validly from Subconclusion 1 and Premise 3. The problem is really with Premise 3 itself, which, as we have seen, has apparently serious limitations. According to Philo, it overstates the power of analogies.

Premise 4: Humanly created objects are caused to exist by intelligent designers (i.e. their human creators).

What did you put here? I don't think anyone need deny this. (Again, just think about the book in your hands, which I can assure you is the product of human design.)

Main conclusion: Therefore the natural world was caused to exist by an intelligent designer, namely God.

'Namely God'? As Philo points out, this move in Cleanthes' design argument is open to an objection that we have already seen while evaluating Aquinas's argument (see Section 1.3 in Chapter 1). Even if the argument does establish the existence of a designer, who is to say that that designer is *God* (rather than, for instance, *gods*)?

This is the end of our step-by-step examination of Cleanthes' version of the argument from design, and Philo's criticisms of it. Our examination was very detailed, and if the details take a little time to come into focus for you, you should not worry. It often happens in philosophy that you need to think things through more than once to get clear about them.

Where does Cleanthes' argument get us?

Activity

Have a look back at the philosophers' terms valid and sound which I introduced in the section on 'Aquinas's "Second Way"' in Chapter 1, Section 1.3. Now ask yourself two questions:

- 1 Is Cleanthes' argument valid?
- 2 Is Cleanthes' argument sound?

(Remember: if it isn't valid, then it can't be sound. So if the answer to (1) is 'no', that tells you straight away that the answer to (2) is also 'no'.)

Review the comments on Cleanthes' argument that I have provided, in which I suggest various objections to the argument, some of them made by Philo. Which of these objections do you think creates the most serious problems for Cleanthes' argument?

Discussion

Is Cleanthes' argument valid?

We have identified three inferences in the argument. The first two seem valid but the final one makes an invalid step in equating the designer with God. However, if the conclusion were simply 'The natural world was caused to exist by an intelligent designer', the argument appears to be valid.

Is Cleanthes' argument sound?

If we accept that the argument for a designer (if not necessarily exactly what we call God) is valid, the next step in evaluating it for soundness is to look at whether all its premises are true. Premise 3 seems to be the weak link. Just because two things resemble each other in one way does not have to mean that they are analogous in all respects – that they have been caused in the same way, for example. As noted in the discussion of this premise, analogical claims like this are not always true, even if they are quite often true. If two things are alike in both being big red apples, then they're very often alike in both being tasty; but some big red apples are sour, or have worms in them. Philo suggests that the analogical reasoning is particularly weak in Premise 3 because (a) the similarities between design/designer and creation/creator are not that great and (b) the relation of creation to creator is unique, a one-off. For these two reasons, says Philo, we cannot have much confidence in Cleanthes' argument for God's existence.

From Cleanthes' point of view, *not much confidence* is still better than *no confidence at all*. Elsewhere in the *Dialogues*, Hume himself seems eventually to concede, through the mouth of Philo, that 'the cause or causes of order in the universe *probably* bear some *remote* analogy to human intelligence' (Hume (1990 [1779]), Dialogue XII, p. 129). So apparently Hume thought that an argument like Cleanthes' does get us *somewhere*. Not very far, and certainly nowhere near as far as would be needed to establish the truth of any of the major religions. But perhaps far enough to make it at least probable that there is a God or gods.

Bearing this in mind, someone friendlier than Hume to the argument from design might wonder if Cleanthes' case can be improved by going back to the beginning. Perhaps Cleanthes' key mistake was to take *the whole universe* as the subject of his argument?

Remember what Premise 1 of Cleanthes' argument said: that 'the natural world' – all of it together – 'is a highly organised system'. The problem with this, as I commented, is that the natural world is highly organised in *some* ways, but not in others. So suppose proponents of the argument from design get a bit more specific about what kind of organisation they are talking about. Might they then have a better argument?

Someone who thinks that the answer to this is 'yes' is William Paley. We will now turn to consider his version of the argument from design.

2.3 The classic argument from design, second version: Paley

Hume's younger contemporary William Paley offers his version of the argument from design at the beginning of his *Natural Theology*, first published in 1803.

Who was William Paley?

William Paley (1743–1805) was an Anglican clergyman and philosopher, with a strong interest in science. He was, among other things, Fellow of Christ's College, Cambridge (1766–76) and Sub-Dean of Salisbury Cathedral (1795–1805). *Natural Theology: or Evidences of the Existence and Attributes of the Deity Collected from the Appearances of Nature* (to give it its full title) is now his best-remembered work, but he also wrote in favour of utilitarianism and American independence, and against the slave trade and the enforcement of religious belief.

We have seen already how important vivid images and pictures can be as ways of helping us to get hold of philosophical ideas (see Chapter 1, Section 1.3). And perhaps Paley remembers the sentence in Hume's *Dialogues* where Hume says 'Throw several pieces of steel together, without shape or form; they will never arrange themselves so as to compose a watch' (Hume (1779), in set book, p. 367). For certainly the vivid story that Paley uses is all about a contrast between a stone and a watch:

In crossing a heath, suppose I pitched my foot against a stone, and were asked how the stone came to be there. I might possibly answer, that for anything I knew to the contrary it had lain there for ever; nor would it, perhaps, be very easy to show the absurdity of this answer. But suppose I had found a watch upon the ground, and it should be inquired how the watch happened to be in that place. I should hardly think of the answer which I had before given, that, for anything I knew, the watch might have always been there. Yet why should this answer not serve for the watch as well



Figure 2.2 William Paley stained glass window, Lincoln Cathedral. Photo: © Lincoln Cathedral.

as for the stone; why is it not admissible in the second case as in the first?

(Paley, 2006 [1803], p. 1)

Activity

The passage from Paley above closes with a question. Rephrase Paley's question in your own words.

Discussion

If someone asks 'How did the stone get to be on the heath?', you can reasonably say 'I don't know – it just happens to be there, that's all'. But if someone asks 'How did the watch get there?', you can't reasonably say this. The stone does not need explanation, but the watch does. Why is there this difference between them?

Activity

Paley answers his own question in the following way. Read through it and then rephrase his answer in your own words. Notice that Paley picks out two features of the watch for particular attention. What are they?

For this reason, and for no other; viz., that, if the different parts [of the watch] had been differently shaped from what they are, if a different size from what they are, or placed after any other manner, or in any order than that in which they are placed, either no motion at all would have been carried on in the machine, or none which would have answered the use that is now served by it.

(Paley, 2006 [1803], p. 1)

Discussion

Paley stresses the watch's **precise organisation** and its **functionality**. A watch's parts are put together in just the right way to perform its function of telling the time. If those parts were even slightly rearranged, they could not serve that function. Not very much rearrangement would be needed to make us say that we do not have a *watch* at all, just something that looks like a watch.

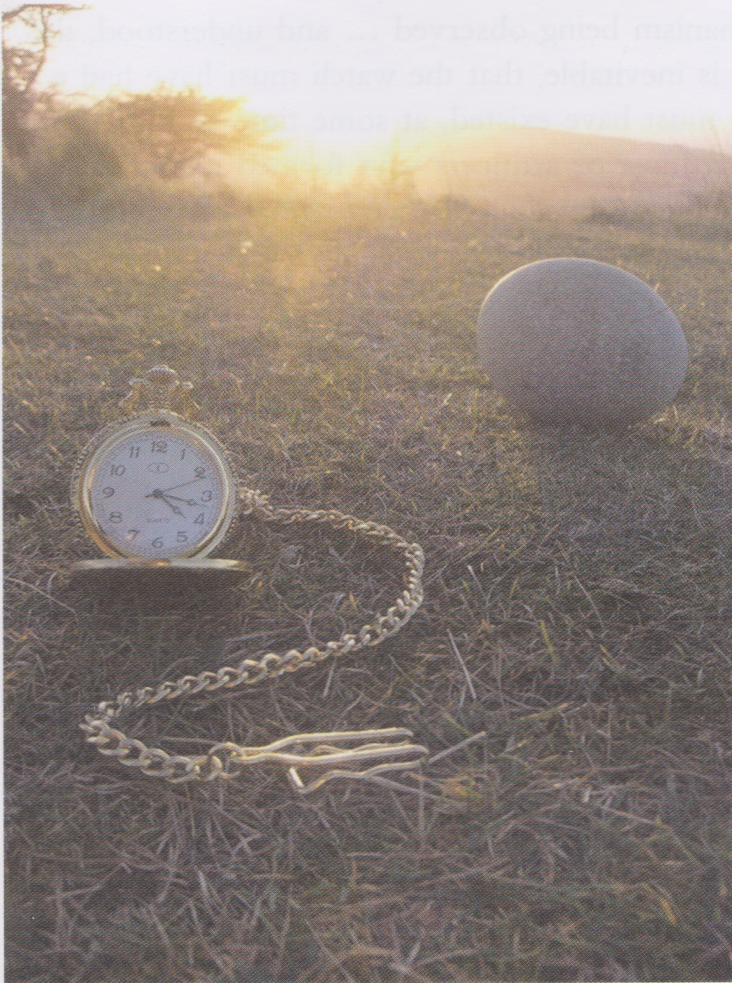


Figure 2.3 A stone and a watch on a heath. Photographed by Miriam Chappell. Photo: © Miriam Chappell.

Stones, by contrast, do not generally have any organised parts, never mind precisely organised parts. Even quite violent attacks on a stone will not stop it from being a stone. Break a stone in half and you will get two smaller stones. Break a watch in half and you certainly won't get two smaller watches! You will just get a mess.

Nor do stones, in themselves, have any distinctive *function*. While you can use a stone in a variety of ways (as a paperweight, as a hammer, as a missile, as a sundial, as an art installation, and so on), none of these deployments is what a stone is for. Unlike a watch, a stone is not *for* anything.

Paley argues that these two key differences, precise organisation and functionality, make it reasonable for us to say something about the watch that we do not have the same reason to say about the stone: *It must have been designed by a purposive agent.*

[The watch's] mechanism being observed ... and understood, the inference we think is inevitable, that the watch must have had a maker – that there must have existed, at some time and in some place or other, an artificer or artificers who formed it for the purpose which we find it actually to answer, who comprehended its construction and who designed its use.

(Paley, 2006 [1803], p. 13)

Now for the key step in Paley's argument from design for God's existence:

Every indicator of contrivance, every manifestation of design, which existed in the watch, exists in the works of nature; with the difference, on the side of nature, of being greater and more, and that in a degree which exceeds all computation. I mean that the contrivances of nature surpass the contrivances of art, in the complexity, subtlety, and curiosity of the mechanism; and still more, if possible, do they go beyond them in number and variety; yet in a multitude of cases, are not less evidently mechanical, not less evidently contrivances, not less evidently accommodated to their end, or suited to their office, than are the most perfect productions of human ingenuity.

(Paley, 2006 [1803], p. 13)

Activity

Read this last passage carefully, and write three or four sentences summarising what Paley is saying here.

- Is his point simply that nature is just like the watch in being precisely organised and having a function?
- Or does he go further than that?

Discussion

Paley isn't saying simply that there is just as much precise organisation and functionality in nature as there is in a watch. He goes further: he's saying there is *even more*. So if we think that the precise organisation and functionality of a watch gives us reason to believe that the watch has a designer, all the more does the precise organisation and functionality

that can be found in nature give us reason to believe that nature has a designer.

Not every feature of the world can be used – as Cleanthes seemed to be suggesting when he described the world as ‘one great machine’ – to mount a convincing argument from design for God’s existence. But, Paley suggests, many features of the world can: namely, those features that display both of the watch’s key attributes, precise organisation and functionality. And there are lots and lots of such features. Paley’s book spends a great deal of time describing them (one of his examples is the eye, which we will consider in the next chapter).

So, we may say, Paley argues like this:

PREMISE	Given a watch’s precise organisation and functionality, it is overwhelmingly more likely that the watch should be the result of design than of accident.
SUBCONCLUSION	By analogy, for all the features of nature that display precise organisation and functionality, it is overwhelmingly more likely that each of them should be the result of design than of accident (inferred from Premise).
MAIN CONCLUSION	So nature must have a designer, namely God (inferred from Subconclusion).

This, then, is Paley’s argument from design for the existence of God.

Evaluating Paley's argument

Activity

Is Paley's argument valid? Is it sound?

Try to think of one or two objections that might be put against it.

- Is he assuming too much about who the designer might be?
- Are there developments in science since 1803 (when he wrote his book) that affect his argument?

Compare the objections you come up with for importance, and put a mark by the one that you think is most important.

Table 2.5 Evaluation of Paley's argument

Objection	How important is the objection?

Discussion

As we have seen from our consideration of **arguments by analogy**, the subconclusion does not unfailingly follow from Premise 1, so this is not a valid inference. If you are unsure about the inference to the final conclusion, you might like to look back at the discussion of Cleanthes' argument. An invalid argument is always unsound.

One objection to Paley's argument focuses on an assumption that Paley makes without arguing for it: that nature's designer must be God. As with Aquinas's and Cleanthes' arguments, there is nothing in Paley's argument from design to prove that nature has just one divine designer, or that this designer has any of the features of the traditional God. (Apart, presumably, from being outside the nature that he creates, and powerful enough to create it.) The point is not that this gap in Paley's argument *cannot* be filled. It is just that he *does not* fill it.

There is another possible objection to Paley, which you are likely to think is more important. This objection comes from the fact that we now have an alternative explanation for at least a lot of the cases of design that

Paley talks about. This is the theory of **evolution**. As the well-known popular scientist Richard Dawkins puts it at the beginning of his book *The Blind Watchmaker*:

Paley's argument is made with passionate sincerity and is informed by the best biological scholarship of his day, but it is wrong, gloriously and utterly wrong. The analogy between telescope and eye, between watch and living organism, is false. All appearances to the contrary, the only watchmaker in nature is the blind forces of physics, albeit deployed in a very special way. A true watchmaker has foresight: he designs his cogs and springs, and plans their interconnections, with a future purpose in his mind's eye. Natural selection, the blind, unconscious, automatic process which Darwin discovered, and which we now know is the explanation for the existence and apparently purposeful form of all life, has no purpose in mind. It has no mind and no mind's eye. It does not plan for the future. It has no vision, no foresight, no sight at all. If it can be said to play the role of watchmaker in nature, it is the blind watchmaker.

(Dawkins, 1978, p. 5)

Evolutionary theory says that precise organisation and functionality do not have to come from design. Some sorts of precise organisation and functionality will help the creatures that happen to display them to survive. But only those creatures that survive long enough will reproduce and pass on their own traits, via their genes, to their children. So traits of precise organisation and functionality that help survival will tend to spread over time, as the creatures that display these traits come to outlive, outbreed and outnumber creatures that do not display them.

Here is a very simple example of natural selection. Suppose you have a population of stripeless proto-zebras being chased by spotless proto-leopards on the savannah. Just as a matter of random variation, these proto-zebras will not all have exactly the same pattern of colour on them; and likewise for the proto-leopards. But a pattern of stripes is a good camouflage for a prey species like the proto-zebras, and a pattern of spots is a good camouflage for a predator species like proto-leopards. So those proto-zebras which have something *more like* a pattern of

stripes on them will tend to evade attacks by proto-leopards more frequently than proto-zebras that don't, and so will survive longer, and so will have more chances to breed. Similarly, those proto-leopards which have something *more like* a pattern of spots on them will tend to be better at attacking the proto-zebras, hence at getting food, hence at surviving and breeding. In a remarkably short evolutionary time-span, a matter of a few generations, these selective pressures will produce the spectacle that we actually see on the African savannah: fully striped zebras fleeing as best as they can from fully spotted leopards (see Figure 2.4).

Paley's reaction to this spectacle might be: 'What a good job God has done of designing zebras so that they can avoid being seen by hunting leopards! And what a good job God has done of designing leopards to get as close as possible to the zebras before the chase starts!' But that, according to evolutionary science, is back to front. It is like thinking that, since the parachute factory has no Complaints Department, every parachute it makes must be perfect. But the parachute factory might also have no Complaints Department for a more sinister reason: because no one who bought a defective parachute survived to complain. Evolutionary explanation works in this latter, more sinister way. It does not say that all of us humans are perfectly adapted to our environment because God is so kind to us. Rather, it says that all the humans who were *not* perfectly adapted to our environment have failed to survive.



Figure 2.4 The evolution of fully striped zebras and fully spotted leopards.

Activity

Now suppose that William Paley steps into a time machine, emerges in the twenty-first century, and learns all about modern evolutionary theory of the sort that I have just summarised. How do you think he might respond?

Discussion

I am asking you to speculate here. Of course, there is no telling *for sure* how Paley would respond. Maybe he would stick to his version of the argument from design, and denounce the modern theory of evolution. Or

maybe he would accept the modern theory of evolution, and give up his version of the argument from design.

But perhaps – and this is the most interesting possibility – Paley would seek a compromise position, a viewpoint that *reconciles* the theory of evolution and the argument from design for God's existence.

How might he do that? Well, Paley could say that the upshot of the theory of evolution is that we do not *need* to appeal to God's existence to explain design in living creatures. Even so, maybe it is still *permissible* to appeal to God to explain it. Paley might suggest that we can see God as *guiding* or *directing* evolution.

This idea of directed evolution is quite common today. It comes in two versions, stronger and weaker. The weaker version of directed evolution simply says that evolution has happened as it has because God has made it happen that way. But then, most theists believe that *everything* that happens is something that God has made happen (or has let happen). So this version of 'directed evolution' isn't a view about *evolution* particularly. It is just a particular application of the theist's general belief in divine providence – the belief that God cares and provides for us in some way (perhaps a mysterious one).

The stronger version of directed evolution is exemplified by the **intelligent design** and **fine-tuning** arguments that a number of scientists have recently defended, and which we will consider in the next chapter. Here, we will look at some examples of these modern versions of the argument from design – together with a problem, the problem of evil, that arises for both the classic and the modern versions of the argument.

Summary

In this chapter we have considered Cleanthes' and Paley's 'classic' versions of the argument from design, and seen some problems with them. Cleanthes' argument sees the whole world as an artefact, and argues that just as artefacts like buildings must have builders, so by analogy the world – 'creation' – must have a creator. The problem with this lies mainly in the analogy that it proposes – how strong an analogy is it, really?

Paley's argument focuses in on more specific examples of design: cases of precise organisation and functionality such as eyes. The trouble with Paley's argument is that the phenomena he points to seem at least equally well explained by evolution.

Activity

Once again, as a final activity in this chapter, have a look at the quiz on the *Exploring philosophy* website.

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Chapter 3

Modern versions of the
argument from design – and
the problem of evil

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Aims

By the end of this chapter you should:

- understand Behe's style of 'intelligent design' argument, and how this may be criticised
- be clear about fine-tuning arguments like Meyer's and Swinburne's, and about how arguments of this sort may be criticised
- have thought about the problem of evil, how this problem grounds an argument against theism, and how to evaluate this anti-theistic argument.

Materials you will need

In this chapter, you will need to listen to the following audio recordings (available on the *Exploring philosophy* website):

- The modern argument from design
- The problem of evil.

You will also be directed to the website for an end-of-chapter quiz.

3.1 Introduction

We ended the last chapter by seeing how the theory of evolution can be used to undermine William Paley's version of the argument from design. In this chapter, we will examine some forms of the argument from design that do not seem vulnerable to criticisms based on evolutionary theory, and are still proposed today. We will look especially at Michael Behe's theory of 'intelligent design', and Stephen Meyer's and Richard Swinburne's versions of the 'fine-tuning argument'. Then we will consider the question why, if God designed the world, God designed it with bad things in it. This question is the one posed for theism by the problem of evil.

Activity

A good way to introduce yourself to the kinds of argument from design that we will be considering in the first part of this chapter is to listen to the audio recording 'The modern argument from design' (available on the *Exploring philosophy* website). In this recording, I discuss the subject with Russell Cowburn and Peter Cave, and, separately, with Richard Dawkins.

As with the other audio activities, you should be prepared to pause the discussion to give yourself a chance to think about and, perhaps, make notes on something that's been said.

When you feel reasonably clear about what is said in the recording, have a go at answering the following questions on the first part (from 0'00" to 4'35", when Richard Dawkins says 'the very opposite of a chance process'). This introduces the topic and discusses Michael Behe's version of the argument from design.

For each of the questions below, I've given time references where you might look for answers. As before, you shouldn't worry if you don't have definite answers to all of them (or even any of them).

First, an 'overview' question. Then four questions on Michael Behe's argument:

- 1 What are the three different forms of the modern argument from design that I distinguish?
- 2 What does Michael Behe mean by 'irreducible complexity'?
- 3 Russell Cowburn cites the eye as an example of 'irreducible complexity' – an example that, in the last chapter, we saw was discussed by Paley and Darwin. What does Cowburn say about it?

You should allow fifteen minutes to listen to the audio recording 'The modern argument from design' – but you will need to listen to some of it more than once. You should allow about forty minutes for this activity.

- 4 What does Peter Cave mean by calling Behe's argument a 'Get Out of Jail Free' card?
- 5 What does Richard Dawkins mean by his 'Mount Improbable' metaphor?

Discussion

- 1 I distinguish (a) arguments that find design *in* the evolutionary process; (b) arguments that find design *before* the evolutionary process – in the preconditions in the world that are necessary for evolution to start; and (c) arguments that say that there must have been a designer for the world itself to start ('fine-tuning' arguments).
 - 2 By 'irreducible complexity', Michael Behe means a complex structure of a sort which helps the animal that has it survive once the animal has *all* of it, but which is no help at all while it's only partially there. If partially evolved eyes are no help, then eyes are an example.
 - 3 Cowburn's comment on the eye example is that: 'Actually half an eye is of tremendous use to you. Even being able to distinguish light from shade is better than not being able to sense anything at all.'
 - 4 Peter Cave means that appealing to design is not an explanation, but a substitute for explanation.
 - 5 Richard Dawkins means that a very improbable end result can emerge eventually, if we have a long enough succession of not very improbable steps preceding it. The improbable end result couldn't come about in one step, any more than someone could jump up a huge cliff in one step. But the very improbable end result can come about by a succession of lots and lots of little steps, each of which is not all that improbable – just as you can get right to the top of even the biggest cliff if there's an easy way to the top round the back.
-

3.2 The modern argument from design, first version: Behe and intelligent design

Can the theory of evolution by natural selection explain *everything* about the biology of living creatures? Some scientists today continue to insist that life on earth, while perhaps *mostly* explicable by something like an evolutionary account, also displays some pockets of resistance to evolutionary explanation, and that in these pockets, there is still space to run a version of the argument from design for God's existence. For example, the contemporary American biochemist Michael Behe argues that there are particular kinds of 'irreducible complexity' that simply could not have evolved through the pressures of natural selection. In his own words (on his academic website):

Many molecular systems in the cell require multiple components in order to function. I have dubbed such systems 'irreducibly complex.' Irreducibly complex systems appear to me to be very difficult to explain within a traditional gradualistic Darwinian framework, because the function of the system only appears when the system is essentially complete.

(Behe, 2010)

Behe's own leading examples of **irreducible complexity** are complicated ones from his own field of research, cellular biology. But his basic idea is an obvious one. As we saw in Chapter 2, Section 2.2, evolution by natural selection is all about *survival value*: the theory predicts that the traits that get passed on from any creature to its offspring will tend, over time, to be those traits that give creatures of that type a greater chance of surviving long enough to reproduce. But genetic mutation modifies creatures' traits only gradually. So a complex structure like an eye, which has obvious survival value once it has appeared, is extremely unlikely to appear fully formed just as a result of one step of genetic mutation. To yield an eye, we will need a process of natural selection which produces the components of an eye (lens, retina, rods and cones, or their simpler parts) *one at a time*. But how could it have survival value for a creature to have a half-formed eye? Surely creatures that are investing biological energy in developing eyes that don't work *yet*, but *will* work a few dozen generations down the track, will be seriously disadvantaged relative to creatures that are not making this so-far-unrewarded investment.

This seems to mean that the theory of evolution by natural selection should predict that *no* eyes will develop. But since eyes obviously *have* developed, that prediction is wrong. So (the argument goes) there must be something wrong with the theory of evolution by natural selection, at least as it applies to the development of the eye. To explain the eye, we need a different sort of explanation.

Behe himself does not give the eye as an example of what he means by irreducible complexity. (And there is a good reason why not: see below.) However, in the cases that he does examine in detail, the structure of his argument is basically the same as the argument I outlined in the last two paragraphs. Behe cites some feature which, he claims, could not develop by natural selection without a process involving a series of prototypes, none of which would have positive survival value, and some of which would actually involve negative survival value. He therefore suggests that we need a better explanation for the feature in question, and proposes that this ‘better explanation is that such systems were deliberately designed by an intelligent agent’ (Behe, 2010).

Evaluating Behe’s argument

Let us now consider what criticisms might be made of Behe’s argument for intelligent design.

Activity

You should allow about twenty minutes for this activity.

Look back at the account of Behe’s argument. Where do you think a critic might find gaps in this argument? How do you think Behe might respond to these criticisms, or fill these gaps?

Try to think of at least three criticisms and responses. Jot them down in Table 3.1 before going on to read the discussion.

Table 3.1 Behe’s argument: criticisms and responses (1)

	Criticism	Behe’s response
1		
2		
3		
4		

Discussion

Have a look at Table 3.2. Here, I've listed four things that a critic might say to Behe. To the first three criticisms, I briefly offer the responses that I think Behe might give (though I stress these are my words, not Behe's). The fourth criticism has no response here, because it needs a longer discussion, which follows.

Table 3.2 Behe's argument: criticisms and responses (2)

	Criticism	Behe's response
1	There is a gap between saying that <i>evolutionary theory</i> cannot explain Behe's 'irreducible complexities', and saying that <i>science</i> cannot explain them. Perhaps some other scientific theory, as yet unknown to us, will explain them.	Yes, but (to date) this unknown theory is <i>unknown</i> . So (to date) we can't discuss it.
2	There is a gap between saying that <i>science</i> cannot explain irreducible complexity, and saying that <i>intelligent design</i> does explain irreducible complexity. There are other possibilities. Sheer chance is one. Another is self-organisation, the ability of simple things to form complex patterns, like iron filings on a piece of paper with a magnet underneath.	Intelligent design is a better explanation than these other possibilities, because it's more probable than sheer chance or self-organisation.
3	There is a gap between positing an <i>intelligent designer</i> , and claiming that the intelligent designer is <i>God</i> . (Note: We've seen this point before, with Aquinas, Cleanthes and Paley.)	Sure. My argument is only one of the things we need to do to fill this gap – but it's a start.
4	Most importantly of all, there is a gap between saying that evolutionary theory or some other kind of science has <i>not yet</i> explained Behe's examples of irreducible complexity, and saying that no kind of science <i>can ever</i> explain these irreducible complexities. Like any scientific hypothesis, evolutionary theory implies a research programme. It proposes a form of explanation, and gets to work applying this form of explanation. To say that it has not yet explained some phenomenon is merely to say that there's still research to be done.	(See below.)

Many phenomena that might seem to be cases of irreducible complexity in Behe's sense have already been explained by further developments in evolutionary theory. For simplicity's sake I shall stick with the example of the eye.

I stress again that Behe himself does not use the eye as an example of irreducible complexity. Paley did, however, and Darwin himself responded to Paley like this:

if numerous gradations from a perfect and complex eye to one very imperfect and simple, each grade being useful to its possessor, can be shown to exist; if further, the eye does vary ever so slightly, and the variations be inherited, which is certainly the case; and if any variation or modification in the organ be ever useful to an animal under changing conditions of life, then the difficulty of believing that a perfect and complex eye could be formed by natural selection, though insuperable by our imagination, can hardly be considered real.

(Darwin, 1998 [1859], pp. 143–4)

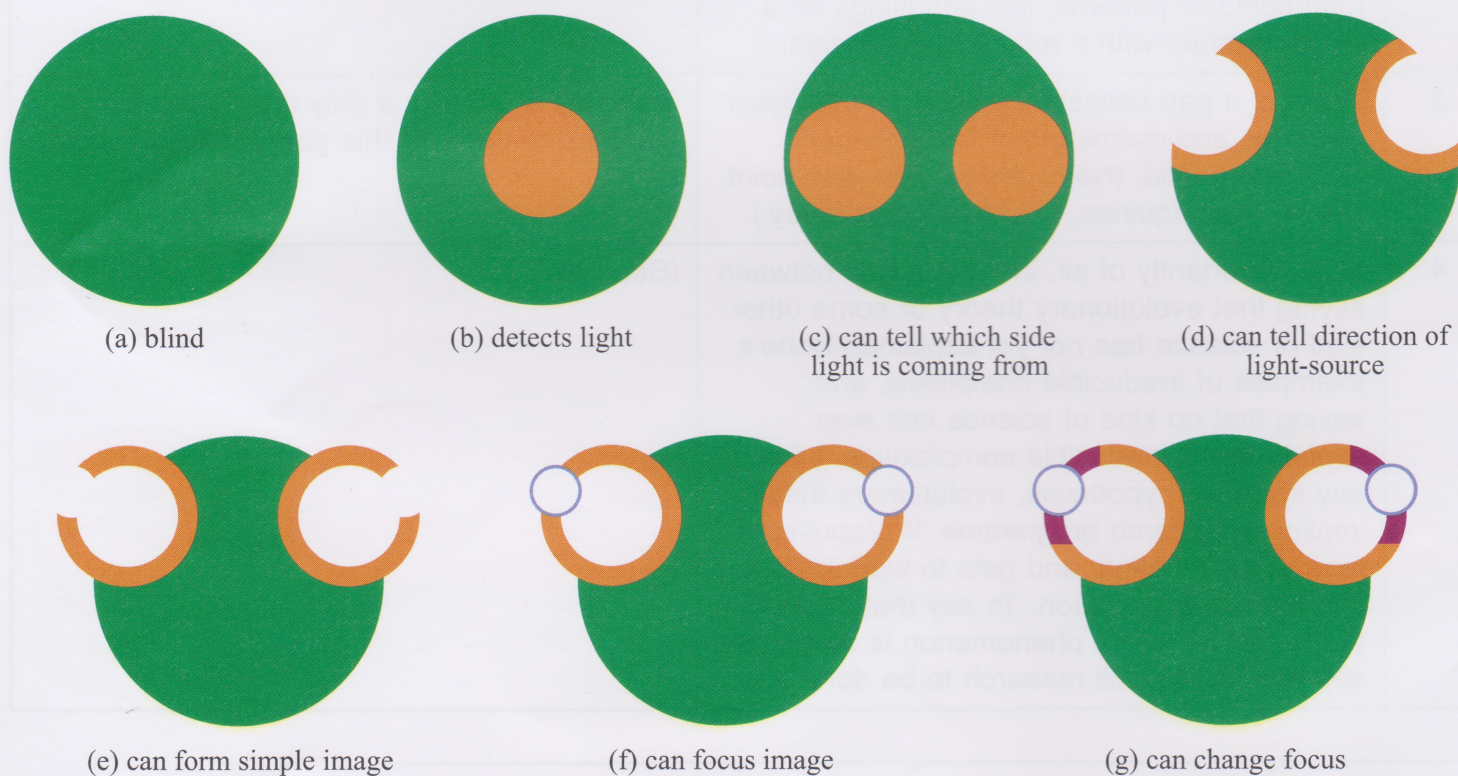


Figure 3.1 Evolutionary stages of the eye.

Darwin's suggestion here has turned out to be exactly right. Today, scientists can state all the stages in the development of the eye, in such a way as to show that there is at least some imaginable evolutionary advantage at every stage (see Figure 3.1).

What applied to eyes in Darwin's time, a critic might say, applies to Behe's examples of 'irreducible complexity' in our time. What has been shown, in the case of the eye, is that there is *no* irreducible complexity involved, if 'irreducible complexity' means what Behe takes it to mean – a form of complexity which gives no evolutionary advantage until it has finished developing. Can the same be done for Behe's examples of irreducible complexity? Maybe, and maybe not. What we can be sure of is this: just because evolutionary science has *not yet* explained these cases, this doesn't mean that it can't or never will. Behe's claim that we need intelligent design to explain his examples of irreducible complexity looks premature. All we can do (the critic might say) is wait and see. And in the meantime, as Peter Cave says in the audio recording 'The modern argument from design', 'no explanation is better than a poor explanation'.

Recall Russell

Cowburn's remarks, on the audio recording 'The modern argument from design', about how useful half an eye might be to us.

3.3 The modern argument from design, second version: Meyer's argument from biological information

If this last criticism of Behe's argument is right, then this version of the argument from design is inconclusive. The cases of irreducible biological complexity to which he draws our attention are not decisive evidence of a designer God, because we cannot be sure that there will never be an evolutionary explanation of them. (As Behe might point out, we cannot be sure that there *will* be either.)

Given this point, can any version of the argument be made to work? Many scientists and philosophers today are inclined to doubt it. They think that evolutionary theory is such a successful way of explaining the emergence of biological complexity that it spells the end of *every* version of the argument from design – and hence of theism, too. Richard Dawkins says, for instance, that 'our own existence once presented the greatest of all mysteries, but ... it is a mystery no longer because it is solved' by evolutionary theory (Dawkins, 1978, p. xiii).

This is surely too quick. Darwin himself seems, to judge by his letters, to have thought it too quick: 'It seems to me absurd to doubt that a man may be an ardent Theist & an evolutionist' (Darwin, 1879). Evolutionary theory is a scientific theory which explains *one* sort of mystery about our existence, namely the evolved biological design that is evident in creatures like us. But this is not the only mystery about our existence, because evolved biological design is not the only kind of design that needs explaining. A world of evolving creatures presupposes a prior state, out of which those creatures have evolved. This prior state is not *explained* by the theory of evolution; it is *presupposed* by it. If, in that prior state, we find evidence of design – evidence, perhaps, of the precise organisation and functionality that Paley talks about – then the argument from design can be restated on the basis of this new evidence.

Is there such evidence? A number of scientists have argued that there is. Stephen Meyer is one of them.

Activity

Have a listen to the second part of the audio recording 'The modern argument from design' in which Stephen Meyer's argument is discussed (from 4'36", 'I wonder if I could tempt ...', to 7'20", '... by gradual,

You should allow about twenty minutes for this activity.

comprehensible steps'). When you feel you have got the idea, try answering these four questions on Stephen Meyer's argument. As before, you're not expected to have definitive answers to them already – this is just a warm up!

- 1 How does Stephen Meyer's version of the argument from design differ from Michael Behe's?
- 2 How would you sum up Russell Cowburn's verdict on Meyer's argument?
- 3 Why does Richard Dawkins think that chance and probability are irrelevant to evaluating Meyer's argument?
- 4 Do you see a possible problem with Dawkins' critique of Meyer's argument?

Discussion

- 1 The difference is that Michael Behe claimed to find examples of design *within* the evolutionary process, whereas Stephen Meyer claims to find examples of design *prior to* the evolutionary process.
- 2 Russell Cowburn thinks it's an interesting argument ('worth thinking about'), but 'we have to be careful', he says, because 'probabilities are very slippery things'. It's hard to be sure, in his view, that Meyer's argument can't be proved wrong.
- 3 Dawkins thinks that Meyer's argument faces a crushing objection before we can even begin to think about chance and probability. The objection is that Meyer invokes a designer God to explain complexity, but this designer God must himself be complex, and no explanation of his complexity is offered.
- 4 The possible problem is that in his critique of Meyer, Dawkins talks about how Darwinian evolution explains how complexity can emerge from simplicity. But Meyer might reply that this misses his point. He's not talking, as Behe was, about complexity within the evolutionary process. He's talking about a complexity that is needed to get evolution going in the first place.

Let us now take a closer look at Meyer's argument.

Stephen Meyer presents what he calls an argument for design from **biological information**. 'Biological information' means the sort of complex coding that makes up the building-blocks of the evolutionary process – nucleic acids such as DNA and RNA (see Figure 3.2).

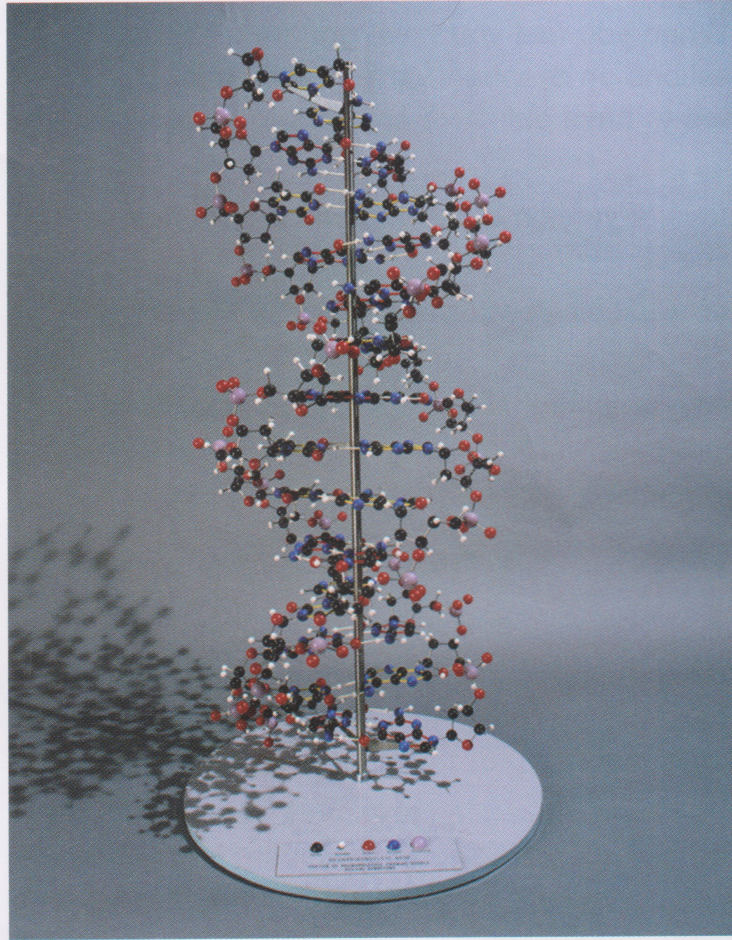


Figure 3.2 Ball and Spoke model of DNA. Science Museum, London, inv. 1965-0265. Unknown photographer. Photo: Science Museum/SSPL.

DNA, RNA and similar ingredients of biological cells are, apparently, not products of evolution, but preconditions. Without them, there can *be* no evolution. So how did DNA and RNA appear on the scene in the first place? As Meyer puts it:

Natural selection can select only what chance has first produced, and chance, at least in a pre-biotic setting, seems an implausible agent for producing the information present in even a single functioning protein or DNA molecule. The probability of constructing a rather short, functional protein at random becomes so small (1 chance in 10 to the power 125) as to approach the point at which appeals to chance become absurd even given the ‘probabilistic resources’ of our multi-billion-year-old universe. Consider further that equally severe probabilistic difficulties attend the random assembly of functional DNA. Moreover, a minimally complex cell requires not one, but roughly 100 complex proteins ... all functioning in close coordination. For this reason,

quantitative assessments of cellular complexity have simply reinforced an opinion that has prevailed since the mid-1960s within origin-of-life biology: chance is not an adequate explanation for the origin of biological complexity and specificity.

(Meyer, 2000)

Activity

Meyer takes a fair number of words here to make a very simple point. This is reasonable enough, because he wants to make his point precisely, and with plenty of evidence to back it up.

Look back over the paragraph cited above and try to draw out the point he is making. How would you put it in your own words?

Discussion

I would say that Meyer wants to get across to us the notion of biological information, the kind of complex information that is encoded in DNA, and to argue that we can rule out chance as the origin of this sort of biological information.

Self-organising systems

Ruling out chance, however, is not all Meyer needs to do to reach the conclusion he is arguing for – that biological information exists because of the activity of an intelligent designer. Meyer goes on to say that there is another way besides chance in which such information might arise without any intelligent designer. It could be a **self-organising system**.

Ordering of cornflakes

One example of a self-organising system is the ordering of cornflakes inside a cereal packet. (Obviously the fact that there is a packet of cornflakes in the first place is a result of human design, not of self-organisation. But we can ignore this here.) Especially if the packet has been shaken a few times, the largest flakes will be right at the top of the packet, the smallest ones will be right down at the bottom (along with that annoying dust that you get in the last bowl of cornflakes that you pour from the packet), and in between there will be a smooth gradation in size from larger to smaller as you go downwards. This is quite a striking piece of organisation, but



Figure 3.3 Bowl of cornflakes.
Photographed by
Greg Elms. Photo: ©
StockFood/Greg
Elms.

the explanation of it is very simple. Gravity is pushing all the cornflakes, big and small, towards the bottom of the packet. But it is easier for smaller cornflakes to sink than for bigger ones, because they can fit through more gaps than big cornflakes can. Hence the smaller the cornflake, the further it sinks when the packet is shaken. Shaking the cornflakes packet can be seen, if you like, as a size-sorting mechanism for cornflakes. But this mechanism emerges purely from self-organisation. The cornflakes are not ranked in size as you go down the packet because the cornflakes manufacturer *wanted* them to be. There is no need to invoke a designer's wishes at all to explain this arrangement.

Self-organising systems are parts of nature where the operation of simple and familiar natural processes leads to a surprisingly complex and orderly outcome. There are lots of self-organising systems in nature. One that works rather similarly to the cornflakes packet is the pebble beach (Figure 3.4), whereby wave action sorts large pebbles to the bottom of the beach and small pebbles to the top. This does not happen because Neptune or Tethys or some other sea-god likes beaches that are arranged that way. It happens because of the simple facts that it takes more energy to move larger, heavier pebbles, and that waves vary in how much energy they contain. Another self-organising system is the bus-cluster, the phenomenon whereby 'you wait ages for a bus and then three come at once'. Despite what some passengers seem to think, this does not happen because bus drivers love being annoying. It happens because large, slow, relatively low-powered vehicles are both the worst at overtaking, and the hardest to overtake (see Figure 3.5).

These examples might make us wonder whether self-organisation is really something different from chance, as opposed to being a special sort of chance. Perhaps it isn't. Still, talking about self-organisation helps us to see how chance can set up quite complex systems of ordering.

Could biological information emerge in this sort of way, as the result of a self-organising system or systems? Meyer's answer is 'no'. His reason for this answer is that self-organisation can only produce systems of *some* complexity. We can't plausibly expect *really, really* complex systems – **information-intensive systems**, as Meyer calls them – to emerge through self-organisation alone. Self-organisation might lead to a size-ordering of pebbles up a beach, but it couldn't lead to a jumbo jet. But biological information consists in *really* complicated systems: the level of complexity involved is like the jumbo jet's, not like the pebbles'. So self-



Figure 3.4 Waves crashing on pebble beach in Dorset, England.
Photographed by Paul Thompson. Photo: © Paul Thompson Images/Alamy.



Figure 3.5 London buses in Oxford Street, London. Photo: © Travelshots.
com/Alamy.

organisation alone is not a plausible explanation of biological information.

Meyer concludes:

If the properties of matter ... do not suffice to explain the origin of information, what does? Our experience with information-intensive systems (especially codes and languages) indicates that such systems always come from an intelligent source – i.e., from mental or personal agents, not chance or material necessity ... Mind or intelligence ... now stands as the only cause known to be capable of creating an information-rich system, including the coding regions of DNA, functional proteins, and the cell as a whole.

(Meyer, 2000)

Activity

Summarise Meyer's argument in this paragraph in your own words. You could use Table 3.3 to set it out as three points, the first two points being premises, the third a conclusion that he infers from those premises.

Which part of his argument do you think is the key move, or the most controversial part?

Table 3.3 Summarising Meyer's argument

	Your summary	Your comments
Premise 1		
Premise 2		
Conclusion		

Discussion

Meyer argues as follows:

- PREMISE 1** DNA and the other chemical building-blocks of life constitute information-intensive systems.
- PREMISE 2** In our experience, 'information-intensive systems *always* come from an intelligent source'.

CONCLUSION DNA and the like must come from an intelligent source as well, namely a designer.

The key move in Meyer's argument – and the really controversial bit – is (2) the claim that, in our experience, 'information-intensive systems *always* come from an intelligent source'. One possible retort would be simply: 'OK, so DNA is the exception!'

What is not controversial is the first step in Meyer's argument. It cannot reasonably be denied that the existence and organisation of the biological building-blocks of life is a prodigy of precise organisation and functionality (as I called these features in our discussion of Paley in Chapter 2).

Consider precise organisation: even a small change in the arrangement or structure or frequency of the chemicals involved would give us nothing like the result we actually have – DNA and RNA that 'work'. Now consider functionality: the arrangement that we actually have in DNA, RNA, and similar chemicals provides nature with the motive force of the evolutionary process of natural selection.

Meyer's argument is that such precise organisation and functionality cries out to be explained. But, he argues, chance and self-organisation are very poor explanations of it, and the existence of an intelligent designer is a much better explanation. So, he thinks, we should accept this explanation.

3.4 The modern argument from design, third version: fine-tuning arguments

Do you think Meyer's argument is a good one? We have already said a bit about that in relation to the audio recording 'The modern argument from design'. We shall now consider Meyer's argument further and evaluate it together with the third and last version of the modern argument from design.

Activity

You should allow about twenty minutes for this activity.

Now listen again to the final part of the audio recording 'The modern argument from design' (this starts at 7'21", 'We turn now to a third version ...'). As before, when you feel ready, have a go at providing non-definitive answers to these four questions about it:

- 1 What is the 'fine-tuning argument'?
- 2 Why does Peter Cave describe himself as feeling 'very, very unspooked'?
- 3 Explain Russell Cowburn's reasons for responding that 'we have the right to be surprised' by the way the universe is.
- 4 How would you sum up Richard Dawkins' response to the fine-tuning argument?

Discussion

- 1 In physics, there are certain numbers that we can measure ('the cosmological constants') which have to have just the right values in order for the universe to sustain life. The fine-tuning argument says that it's very, very improbable – and so, very surprising – that the cosmological constants should be set just right, and suggests that the reason why they are set just right is because a designer, God, set them.
- 2 Peter Cave says he is 'unspooked' (8'50") because the surprise at the heart of the fine-tuning argument is this: 'Oh look, conditions are just right for us humans!' But if conditions had been otherwise, then the surprise might have been 'Oh look, conditions are just right for us aliens!' (or 'just right for hydrogen'). A connected thought is that every lottery draw produces a very improbable result, but that improbable result isn't *surprising*; the draw had to produce *some* result, and it happened to be this one.
- 3 Nonetheless, Russell Cowburn suggests that we have the right to be surprised by the appearance of a universe with us in it, because that

is a result that can only come about in very few ways. Most possible values of the cosmological constants produce 'boring' universes, with not much in them except hydrogen. The specific values that are there in our universe produce a very interesting universe. And that, he suggests, is surprising.

- 4 Richard Dawkins' response begins with the same point as he made against Meyer's argument, that the fine-tuning argument doesn't explain where the fine-tuner comes from: 'you're left exactly where you are'.

('Exactly where you are'? Mightn't a defender of the fine-tuning argument reply that he's explained *a bit* more than his opponent, because he's explained the universe's existence by saying that God fine-tuned it? 'Sure,' he might admit, 'I haven't explained God as well.' But that's a different problem. As Peter Cave says, 'No explanation is better than a poor explanation.')

Dawkins then lists three alternative ways of rejecting the fine-tuning argument: (a) some physicists (such as Peter Stenger) deny that the universe is all that fine-tuned after all; (b) others (Dawkins calls them the 'hard-nosed' physicists) point out that whatever improbable things have to happen to bring about our universe, that just is, by definition, the one that we're in; finally, (c) Dawkins cites the many-universes hypothesis, accepted by Sir Martin Rees and others, which says that, for every setting of the cosmological constants, there is a universe with that setting. So it isn't true that the only universe that exists is fine-tuned; on the contrary, the vast majority of the universes that exist are not fine-tuned. Though, of course, the one that we live in is one of the few that are fine-tuned.

In Section 3.3, we considered Stephen Meyer's argument that the precise organisation and functionality of DNA, RNA, and the like, cries out to be explained, and that the existence of an intelligent designer is a good explanation.

As we can now see, there are other arguments which draw our attention to some striking precise organisation or functionality that can be seen in the processes that brought about the universe. To go with the audio discussion, here is a passage from the distinguished contemporary philosopher of religion Richard Swinburne. In his book *The Existence of God*, Swinburne presents reasons for believing in God which depend on a fine-tuning argument. Here, he expounds on what is sometimes called the **Goldilocks Principle**.

Laws of nature determine which states of the universe give rise to which succeeding states ... The present consensus of evidence is that certain very unlikely features of laws are necessary for the occurrence of carbon-based life ... [For instance] we need both of two crucial dimensionless numbers to be small: Alpha, the fine structure constant, and Beta, the electron-to-proton mass ratio. Their small value makes possible the long chains of molecules, such as DNA, which make life possible. But Alpha and Beta too small would not give stable enough atoms ... [Other] variations would have the consequence that the larger elements, including carbon, could not exist. A slight increase in electromagnetic force would have the same effect.

(Swinburne, 1991, pp. 305–7)

Activity

Read through the passage from Swinburne again. See if you can deduce what the Goldilocks Principle is.

Discussion

The Goldilocks Principle says that, to get a universe going, the conditions have to be neither too much, nor too little, but 'just right'. (Just like Goldilocks' preferred chair, bowl of porridge and bed, which were neither too upright, hot or hard nor too laid-back, cool or soft – the conditions were just right.)

Swinburne continues:

Further, given the actual laws of nature or laws at all similar thereto, boundary conditions will have to lie within a narrow range of the present conditions if intelligent life is to evolve. For the formation of intelligent life in a universe expanding from an initial singularity, conditions at the time of the Big Bang have to be just right. The initial rate of expansion is critical. If the initial velocity of expansion were slightly greater, stars and so the heavier elements would not form; if it were slightly less, the universe would collapse before it was cool enough for the elements to form.

(Swinburne, 1991, p. 307)



Figure 3.6 Jessie Willcox Smith, *Goldilocks samples the porridge*.
 Photographed by Paris Pierce. Photo: © Paris Pierce/Alamy.

And he concludes:

the peculiar values of the constants of laws and variables of initial conditions are substantial evidence for the existence of God, which alone can give a plausible explanation of why they are as they are.

(Swinburne, 1991, p. 312)

Now it is time to evaluate Swinburne's argument. As promised, we shall evaluate Meyer's argument at the same time.

You should allow about twenty minutes for this activity.

Activity

Read back through the passages above and think about Stephen Meyer’s argument, described in Section 3.3.

How closely parallel is Swinburne’s argument to Meyer’s? Use Table 3.4 to write out both arguments in a way that displays the parallels.

Table 3.4 Comparing Meyer’s and Swinburne’s arguments

Meyer’s argument	Swinburne’s argument

Discussion

In the different contexts of biochemistry and cosmology, Meyer and Swinburne both offer versions of the version of the argument from design for God’s existence known as the fine-tuning argument. Meyer focuses on the initial biochemical conditions required for life to start and begin evolving; Swinburne focuses on the initial physical conditions required for the universe itself to start. But their arguments have the same basic form.

Table 3.5 Fine-tuning arguments

Meyer's argument	Swinburne's argument
If the initial biochemical conditions had not been just right, the valued result we call <i>life</i> would not exist.	If the initial cosmological conditions had not been just right, the valued result we call <i>the universe</i> would not exist.
The fact that the initial biochemical conditions <i>were</i> just right was either a result of chance (either pure chance, or chance as self-organisation); or it was a result of design.	The fact that the initial cosmological conditions <i>were</i> just right was either a result of chance (either pure chance, or chance as self-organisation); or it was a result of design.
But it is hugely improbable that these initial conditions could have been right by any sort of chance.	But it is hugely improbable that these initial conditions could have been right by any sort of chance.
So they were right by design.	So they were right by design.
So biochemical 'fine-tuning' is evidence of a designer, i.e. God.	So cosmological 'fine-tuning' is evidence of a designer, i.e. God.

Activity

What objections do you think there might be to fine-tuning arguments for God's existence like those offered by Meyer and Swinburne? Try and come up with as many as you can.

(Remember: this isn't just an exercise for opponents of fine-tuning arguments. Those who decide to accept such arguments will need to think carefully about how to defend them philosophically – and that means working out what the objections are going to be.)

Discussion

One objection that may occur to you is the one that I have been raising about every version of the argument from design that we have considered. This is the identification of the designer with God. As before, this is a big step, which requires a good deal of further argument that the argument from design, in itself, does not give us.

Another objection invokes what, thinking back to Chapter 2 (Section 2.3), we might call the 'parachute factory principle'. As I pointed out there, evolutionary explanation does not say that we humans are perfectly adapted to our environment because God is kind. Rather, it says that all the humans who were *not* perfectly adapted to our environment have failed to survive. Mightn't a similar point be true about the fine-tuning of the

Arthur Schopenhauer (1788–1860) expresses his pessimistic view in *The World as Will and Representation* (1818).

universe? As the popular writer Bill Bryson put it, in his *A Short History of Nearly Everything*: 'Although the creation of a universe might be very unlikely, no one [has] counted the failed attempts' (Bryson, 2003, p. 34).

A third objection is about the idea that the existence of life, or of the universe itself, is a 'valued result'. It should be obvious that there is a great deal in life, and indeed in the universe, that we do *not* (positively) value, or that we count as of negative value. We might even think that life or the universe is of negative value overall. There have certainly been thinkers who are pessimistic enough to think this: the great nineteenth-century German philosopher Arthur Schopenhauer is one example, and, perhaps, Eric Idle, the member of the Monty Python team who wrote 'All things dull and ugly' (quoted in Chapter 2), is another.

But even if we take a more optimistic attitude to the overall value of the world, we have to admit that there is still plenty of negative value 'in the mix' that makes up the world. And if we accept the argument from design, this negative value ought to worry us. If God *has* designed the world, why has he designed a world with so many bad things in it?

This question has occurred to plenty of people, including some of the philosophers we have already met in this book. For example, David Hume:

Look round this universe. What an immense profusion of beings, animated and organised, sensible and active! You admire this prodigious variety and fecundity. But inspect a little more narrowly these living existences ... How hostile and destructive to each other! How insufficient all of them for their own happiness! How contemptible or odious to the spectator! The whole presents nothing but the idea of a blind nature, impregnated by a great vivifying principle, and pouring forth from her lap, without discernment or parental care, her maimed and abortive children!

(Hume, 1990 [1779], p. 121)

This brings us to the problem of evil, which we shall look at in the last section of this chapter.

3.5 The problem of evil

The problem of evil is certainly a problem for anyone who wants to offer an argument from design for God's existence: 'If a perfectly good God designed the world, why didn't he design a perfectly good world?'

But the problem goes wider than that. It is a problem for anyone who believes in a God who, like the Christian or Muslim or Jewish God, is both *perfectly good* and *perfectly powerful* (omnipotent).

Activity

Listen to the audio recording 'The problem of evil', which features a debate between Peter Cave, Mark Goldsmith, Mona Siddiqui and Keith Ward. As before, this is a way of 'warming up' for our study of the topic. Listen to the recording a couple of times and then have a go at answering the following questions.

- 1 Winifred Robinson introduces the problem of evil in a very simple way; Peter Cave then introduces it in a slightly more formal way. What are the ways? Are they compatible?
- 2 What is Keith Ward's suggested response to the problem of evil?
- 3 What is Mark Goldsmith's suggested response to the problem of evil?
- 4 What is Mona Siddiqui's suggested response to the problem of evil?
- 5 What is Peter Cave's basic view about the problem of evil?

The audio recording 'The problem of evil' lasts about fifteen minutes – but you will need to listen to it more than once. You should allow forty minutes for this activity.

Discussion

- 1 Winifred Robinson says that the problem of evil can be framed as the question: 'How can a world created by an all-powerful and all-loving God have so much evil in it?' (0'34"). At 1'03", Peter Cave says that the problem of evil is the problem that three propositions are inconsistent (that is, they cannot all be true): (1) God is all-powerful; (2) God is all-loving; (3) there is evil in the world. We can't drop (3), so we have to drop (1) or (2). There is no conflict between these two statements of the problem – Peter Cave's is just a more formal version of Winifred Robinson's.
- 2 Keith Ward suggests, a little tentatively (he says that not all Christians would agree with him on this), that the answer is to drop (1), the claim that God is all-powerful, or 'omnipotent' (1'46"). As he goes on to explain, his idea is that God has set up the universe in such a way that its natural processes obey certain physical laws. God doesn't normally interfere with these natural processes: he lets them run, and thereby surrenders his omnipotence over them. But these processes

have huge potential for both good and ill. For example, carbon-based life-forms like us can't even exist unless there is nuclear fusion in stars to create the element carbon in the first place. But nuclear fusion means huge explosions (supernovae), and explosions kill.

- 3 Mark Goldsmith is asked by Winifred Robinson whether the Jews – often called 'God's chosen people' – don't have particular reason to wonder about the problem of evil, given the terrible things that have been done to them in history (for example by the Nazis). His first comment is that being 'God's chosen people' is not about being given an easy ride (3'53"). He adds three suggestions about how to respond to the problem of evil. The first is that in time everything will come right, even if we cannot now see how. The second is that God withdraws – 'hides his face' – from the world in order to give humans space to make free choices, free choices that can be evil ones. And the third is that being 'God's chosen people' should give followers of the Jewish faith 'a sense of mission', a desire to put things right in the world. Well done if you spotted that Winifred Robinson's summary here is not quite accurate!
- 4 Unlike the other theists in the debate, Mona Siddiqui suggests that evil – or at least suffering – does come from God, can even be what she calls a sign of God, and that it is meant to test believers' faith (5'31"–6'43"). Notice how close she comes to saying here that although there is suffering, it is not *evil*, because God means it to happen to test us. It looks like her response to the problem of evil, as Peter Cave outlined it, is not Keith Ward's. She does not want to drop the proposition (1) that God is all-powerful. She prefers to drop the proposition (3) that there is evil in the world. Apparently this is why she says that Muslim theologians have often 'just dissolved the problem as soon as it comes up'.
- 5 Peter Cave thinks that the problem of evil is insoluble for theists. He thinks that the existence of evil proves that there can't be a God who is both omnipotent and perfectly good – and that if there can't be a God like that, then there can't be a God at all (1'03"–1'44"). He goes on to endorse a suggestion of John Stuart Mill's that if we look around the world for evidence as to whether God is good or bad, the evidence we find will 'blacken God's name' (8'00"). Mill meant by this that the evidence of the world, with all its evils and troubles, does not point to a good God. It points to a cruel God, or at best to a conflict between two gods, one good and one bad.

John Stuart Mill (1806–1873) was an English philosopher and economist. You will look at his moral philosophy in Book 3, Chapter 2.

The audio recording 'The problem of evil' raises a lot of issues for discussion. For example, you might want to think more about Keith

Ward's suggestion to drop the claim that God is all-powerful and ask yourself:

- Why couldn't an omnipotent God set up the universe using laws and processes that only have good potential, and not harmful potential, too?
- The idea of heaven is, apparently, the idea of a place or state where natural laws and processes only have good potential. If that's not possible now, how can it be possible in heaven?
- Believers often say that God *does* interfere sometimes: many of them believe that miracles happen, and miracles are divine interventions in natural processes. So if God intervenes at all, why doesn't he intervene more often?

For a full discussion of miracles, see Chapter 4.

Finally, you might want to think about whether you agree with Peter Cave's endorsement of John Stuart Mill's view:

- Do you think that believers typically believe in a good God because they look around the world and think 'The world is good, so the God who made it must be correspondingly good'?

We will leave this debate for now, and turn to a closer study of the problem of evil. Naturally, quite a few of the issues raised in the audio recording will come up again as we go along.

Epicurus' riddle

The first known philosophical statement of the problem of evil is what is sometimes called **Epicurus' riddle**. This is said to derive from the Greek philosopher Epicurus (341–270 BC) (see Figure 3.7).

We do not have any statement of the problem in Epicurus' own words. But six hundred years later, Epicurus' argument is reported by the Christian philosopher Lactantius (c.AD 240–c.320), as follows:

God, says Epicurus, either wishes to prevent evils, and is unable; or he is able, and is unwilling; or he is neither willing nor able; or he is both willing and able. If he is willing and is unable, he is weak, which does not fit the character of God. If he is able and unwilling, he is malevolent, which does not fit God's character either. If he is neither willing nor able, he is both malevolent and weak, and therefore not God at all. If he is both willing and able,

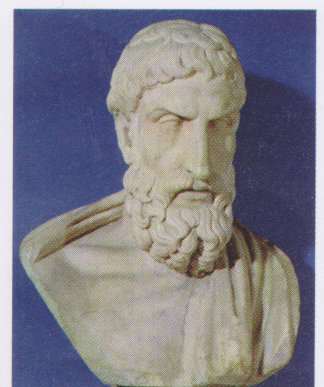


Figure 3.7 Bust of Epicurus, 341–270 BC, stone. Musei Capitolini, Rome. Photo: © Giraudon/The Bridgeman Art Library.

which alone is fitting for God, from what source then are evils?
Why does he not prevent them?

(Lactantius, 1844 [AD c.313]; my translation)

Activity

We can write out the philosophical problem that Epicurus sets here for theists as a formal argument of the same sort as we saw Cleanthes give in Chapter 2, that is, as a series of premises leading, via subconclusions, to a main conclusion.

Read the quotation from Lactantius over carefully and more than once. Try to understand the argument as a whole. Start by trying to identify his main conclusion. When you think you have managed this, ask yourself: What are Epicurus' key premises? Are there any intermediate conclusions he tries to reach on his way to the main conclusion? Are any premises or subconclusions left **implicit** (i.e. they are needed for his argument to work but they are not set down explicitly on the page)? Do not panic if you are still finding this difficult, but do have a serious go at it. Then move on to the discussion.

Discussion

All being well, you will probably get something like this as your representation of Epicurus' riddle.

PREMISE 1	If God is perfectly powerful, then he can make whatever he wants happen.
PREMISE 2	If God is perfectly good, then he will only want the very best possible events to happen.
SUBCONCLUSION 1	So if events happen that are not the very best possible, then either God is not perfectly powerful, or God is not perfectly good (from Premises 1 and 2).
PREMISE 3	But events do happen that are not the very best possible.
SUBCONCLUSION 2	So either God is not perfectly powerful, or God is not perfectly good, or both (from Subconclusion 1 and Premise 3).
PREMISE 4	But a God who is not both perfectly good and perfectly powerful is not <i>God</i> at all.
CONCLUSION	So God does not exist (from Subconclusion 2 and Premise 4).

Evaluating Epicurus' argument

Epicurus' riddle is a challenge to theism. (Obviously, since theism means the belief that God exists, and Epicurus' riddle ends with the conclusion that God does not exist.) How might theism be defended against this challenge?

The key to answering this question is to work through the steps of the argument, as we laid it out in the activity above, to see which of them a theist could deny. So I suggest we do the same as we did with Cleanthes' version of the argument from design in Chapter 2.

Activity

Take each step of Epicurus' argument, and work out your own comment on it. You could use Table 3.6 to help. Ask whether it is a true premise (or conclusion) and whether it is a valid inference from what comes before it. Then compare my comment on it, to see how it matches up (if it does).

You should allow about twenty minutes for this activity.

As before, step back from your own commitments here. This exercise is about putting yourself in the theist's shoes, and seeing how *the theist* might respond to Epicurus's argument. It is not about whether you yourself are a theist.

Table 3.6 Evaluation of Epicurus' argument

	Your comments
Premise 1	
Premise 2	
Subconclusion 1	
Premise 3	
Subconclusion 2	
Premise 4	
Main conclusion	

Premise 1: If God is perfectly powerful, then he can make whatever he wants happen.

Can he? What were your comments here? Philosophers have argued a lot over whether there are things that not even God can do. For example, they have asked whether even God can make $2 + 2$ equal 5. Some truths, including mathematical truths like ' $2 + 2 = 4$ ', do not seem alterable in the way that 'My car is parked on South Street' is alterable. My car could easily be parked on North Street instead. But how could $2 + 2$ possibly not equal 4? What could it equal *instead*? There seems to be no answer to this question. As philosophers say, it is a *necessary truth* that $2 + 2 = 4$. So God can't make just anything happen, because he can't make true what is necessarily *untrue*.

You might like to think about how this might help the theist against Epicurus' argument. Can he say, for instance, that it is a necessary truth that evil must happen in the world, or at least be possible in the world? In the audio recording 'The problem of evil', Keith Ward and Mona Siddiqui both suggest that the evil or suffering that is in the world might be necessary. But do they mean necessary in the way that $2 + 2 = 4$ is necessary?

Premise 2: If God is perfectly good, then he will only want the very best possible events to happen.

Will he? What were your thoughts about this premise? A theist might reply that it depends on whether we know what we mean by 'the very best possible events'. Compare the phrase 'the biggest possible number'. Can you imagine a number so big that it couldn't be increased? No, because there *is* no biggest number. Maybe the same is true with 'the very best possible events'. Maybe there are just lots of good events that might happen, but no set list of 'the very best possible events'. If so, then we needn't say that God will only want 'the very best possible events' to happen.

Another possibility: some philosophers think that you don't always have to choose the best option available in order to count as a good person. Maybe this is true, and applies to God. If so, then even if there *is* a determinate list of 'the very best possible events', it doesn't follow that God must want just these events to happen if he is to count as perfectly good. He only has to want some very good events to happen. (They do still have to be *very good* events, of course, even if they're not *the best possible* events.)

Subconclusion 1: So if events happen that are not the very best possible, then either God is not perfectly powerful, or God is not perfectly good.

Subconclusion 1 might seem to follow from Premises 1 and 2. But there is a way of denying Subconclusion 1 while still accepting Premises 1 and 2. Maybe God has created creatures (such as ourselves) who can make our own choices between good and bad. Maybe God wants our freedom to make these choices to be a real freedom. So when we choose badly, events happen that are far from being 'the very best possible events'. Nonetheless God does not interfere, or not always. He 'shrinks back' (the phrase is Mark Goldsmith's in the audio recording) to allow us our freedom. So although God always *wants* the very best possible events to happen, and is always *able* to make them happen, the very best possible events do not always happen – because we do not choose them, and God does not override our bad choices.

This line of argument is called the **free will defence**. It has been much discussed. Very briefly, here are three familiar problems with it, which you might like to think about further:

- 1 Not all the bad events that happen can realistically be blamed on anyone's free choices, good or bad. No one is to blame for

earthquakes or asteroid impacts. (Peter Cave makes this point in the audio recording.)

- 2 Is free choice a ‘good swap’ for all the bad things that happen? Is a world which contains both free will and Auschwitz better than one which contains neither?
- 3 Why can’t God create creatures who always freely choose to do what is right or good? Maybe these creatures have lots of options to choose between, all of which are right or good – God only blocks them when they try to choose wrong or bad options. Or maybe the right way to understand ‘free choice’ makes it compatible with the determinist claim that no choice could ever be made otherwise than it actually is made.

Premise 3: But events do happen that are not the very best possible.

Do they? What did you think about this premise? Some theists have picked Premise 3 out as the premise to deny in Epicurus’ argument. Leibniz, for example, believed that ‘All is for the best in this, the best of all possible worlds.’

Leibniz presents his argument in *Theodicy: Essays on the Goodness of God, the Liberty of Man and the Origin of Evil* (1710). We won’t look at this here, but you can read an extract in the set book, if you wish: see Part VI, Reading 5, ‘The Problem of Evil’.

Subconclusion 2: So either God is not perfectly powerful, or God is not perfectly good, or both.

This follows from Premise 3 and Subconclusion 1. If you accept both of those premises, it’s irrational to deny Subconclusion 2.

Premise 4: But a God who is not both perfectly good and perfectly powerful is not *God* at all.

Isn’t he? Certainly the dominant traditional view of God in Judaism, Christianity and Islam sees God both as perfectly good and as perfectly powerful. But obviously a theist who is not a traditional Jew, Christian or Muslim is in no way bound by that. For example, Epicurus himself was a theist, but rejected the idea that God is perfectly good, at least in any way that might help us. According to Epicurus, God is just not very *interested* in humans and their tiny problems.

You sometimes find a view rather like Epicurus' even within Judaism, Christianity and Islam. In these three traditions it is quite often denied that God is perfectly good – at least as we mean the words, or in any way that we can hope to understand. 'My thoughts are not your thoughts, neither are your ways my ways', wrote the Jewish prophet Isaiah (Isaiah 55:8). The idea that God is inscrutable – beyond all possible human understanding – is equally central to Islam, Judaism and Christianity. (Mona Siddiqui, Mark Goldsmith and Keith Ward all express at least some sympathy for this idea in the audio recording.)

Otherwise, theists can deny that God is perfectly powerful, at least if God's being perfectly powerful means that God is able to make whatever he wants happen *at every moment*. Perhaps, as St Paul suggested in the first century, God's being perfectly powerful only means that God and goodness will win *in the end*:

All that we suffer at the present time is as nothing in comparison to the glory which is destined to be disclosed for us ... It was not for its own purposes that creation had frustration imposed on it, but for the purposes of him who imposed it – with the intention that the whole creation itself might be freed from its slavery to corruption and brought into the same glorious freedom as the children of God.

(Jerusalem Bible, Romans 8:20–1)

Or as William Temple (Archbishop of Canterbury from 1941–1944) said in the twentieth century:

What we must completely get away from is the idea that the world as it now exists is a rational whole. We must think of its unity not by the analogy of a picture, of which all the parts exist at once, but by the analogy of a drama where, if it is good enough, the full meaning of the first scene only becomes apparent with the final curtain; and we are in the middle of this. Consequently the world as we see it is strictly unintelligible. We can only have faith that it will become intelligible when the divine purpose, which is the explanation of it, is accomplished.

(quoted in Iremonger, 1948, pp. 537–8)

Saul of Tarsus (St Paul), c.5 BC to AD c.67, Jewish scholar then early convert to Christianity, was a leading theologian of the early church and author of several of the most influential books in the New Testament; he was executed in Nero's persecution.

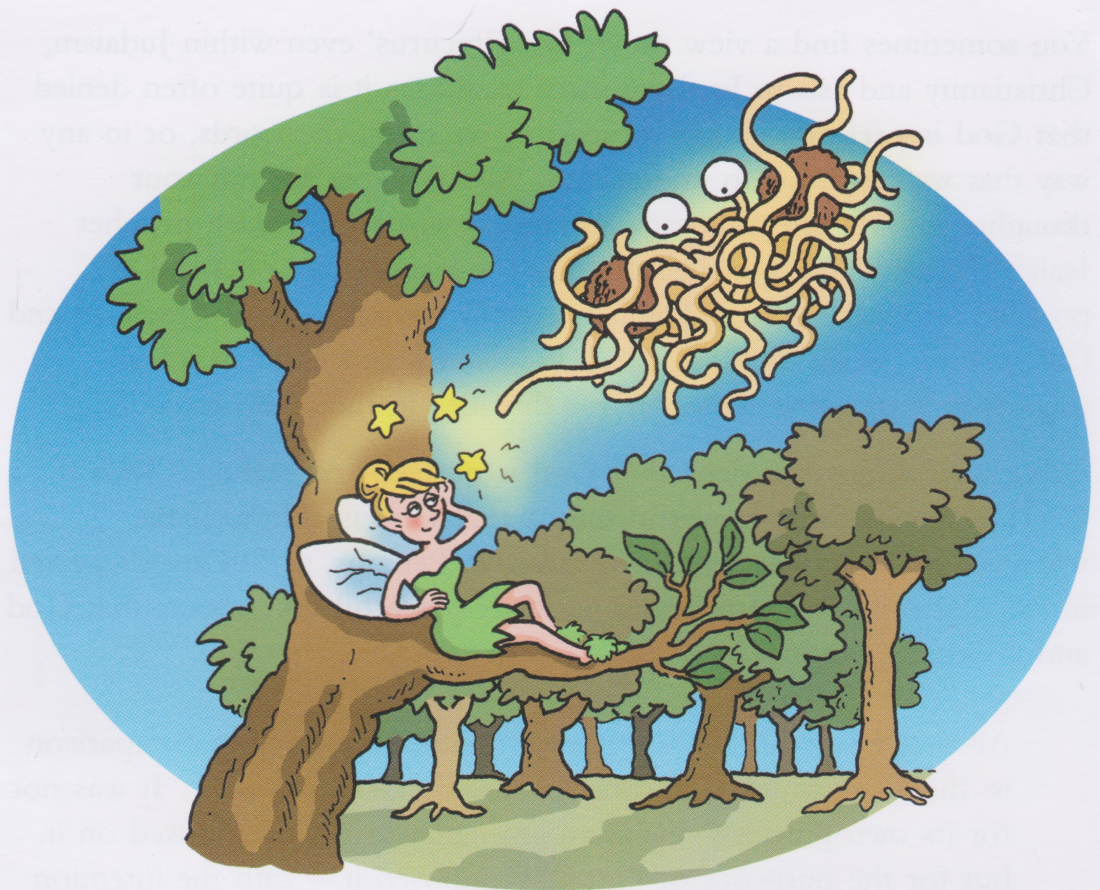


Figure 3.8 The Flying Spaghetti Monster brings Tinker Bell back to life.

For St Paul and for William Temple, the solution of the problem of evil becomes, not a present reality, but a hope for the future. Can this hope be a reasonable hope? Is their **future-hope defence** a reasonable defence of theism against the problem of evil?

That is a tricky question. It is harder to say conclusively that any given hope is reasonable or unreasonable than to say whether any given proposition is true or untrue. However, we can see that *some* hopes are clearly reasonable, while others are clearly *unreasonable*:

Reasonable Hope: If my wife has promised to buy me a birthday present, she will.

Unreasonable Hope: If I say 'I do believe in fairies' often enough and loud enough, the Flying Spaghetti Monster will bring Tinker Bell back to life (see Figure 3.8).

Is St Paul's and William Temple's hope for the future a reasonable hope, or an unreasonable one? To see that, compare my hope about my wife and my hope about the Flying Spaghetti Monster. Part at least of what makes the hope about the Flying Spaghetti Monster unreasonable

is its basis in fantasy and unreality, and the complete lack of connection between that hope and anything I have ever actually experienced. And what makes the hope about my wife reasonable is that I know her, and know, from experience of my past interactions with her, how she acts and thinks, and what she is likely to do.

So one way in which hopes about some person's future actions can be shown reasonable (or otherwise) is by a *context of experience of that person*. Is there, or could there be, such a context in the case of God? To consider that question, and the issues that it raises about claimed revelations, miracles and religious experiences, is our next business. These issues will be considered in Chapter 4.

Summary

In this chapter we have looked in detail at some modern versions of the argument from design. The three we focused on were Behe's, which sees design in certain features found *within* the evolutionary process; Meyer's, which sees design in certain features that are *preconditions* of the evolutionary process; and the fine-tuning argument, which suggests that there must have been a designer to set the cosmological constants to exactly the right values for life to emerge. We have seen how these three arguments can be criticised. We have also raised and considered the problem of evil which is raised by all versions of the argument from design: the problem for theists of how to reconcile their belief that God is all-powerful and all-loving with the existence of evil.

Activity

Now have a go at the quiz for this chapter on the *Exploring philosophy* website.

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Chapter 4

Acts of God?

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Aims

By the end of this chapter you should:

- be clear about the structure of the argument from miracles for God's existence
- understand how this argument may be criticised and, in particular, how Hume argued against the possibility of miracles
- be clear about the structure of the argument from religious experience for God's existence
- understand how the argument from religious experience may be criticised.

Materials you will need

In this chapter, you will need to refer to the following reading in the set book:

- Part VI, Reading 7, 'Against Miracles: David Hume, *Enquiry concerning Human Understanding*'.

You will need to listen to the following audio recordings (available on the *Exploring philosophy* website):

- Hume on miracles
- Religious experience.

You will also be directed to the website for an end-of-chapter quiz.

4.1 Introduction

In this chapter we will consider whether there are good arguments to be made for God's existence from **miracles** and from **religious experience**. We will look in detail at arguments such as David Hume's against miracles, and notice the parallels between these arguments and arguments against the possibility of genuine religious experience.

Introducing arguments from miracles and from religious experience

Back in Chapter 1 (Section 1.3), we were collecting types of argument for and against God's existence. Three interesting types of argument that we came up with were these:

- (5) Arguments from personal experience
- (6) Arguments from history
- (7) Arguments from the way the world is.

In Chapter 2 and most of Chapter 3, we focused on one particular sort of argument for God's existence from (7), 'The way the world is' – the argument from design. Then in the last section of Chapter 3, we focused on an argument from the way the world is against God's existence – Epicurus' riddle, the problem of evil as a reason for doubting or denying God's existence. In Chapter 4, we are now going to look at theistic arguments of types (5) and (6).

These two sorts of argument for God's existence are both arguments that deduce the existence of God from his alleged interventions in the world:

- the argument from personal experience (5) says that we can know that God exists because God acts *in people's experience*
- the argument from history (6) says that we can know that God exists because God acts *in history* – and, in particular, that he produces the extraordinary interventions that are known as miracles.

So in their very simplest forms, these arguments for God's existence would go like this:

- *Argument from religious experience*: If people experience God, then God exists. People do experience God. So God exists.

- *Argument from miracles*: If miracles happen, then God exists. Miracles do happen. So God exists.

I discuss the argument from miracles in Section 4.2 and the argument from religious experience in Section 4.3.

4.2 The argument from miracles

Introducing the idea of 'miracle'

Not all believers in God are also believers in miracles. Many believers, especially in the West in the last three centuries, have believed in a God who does not (as they sometimes put it) 'interfere in nature'. This was the view taken by the **deists** of the seventeenth and eighteenth centuries, who were a strong influence in Hume's time.

Nonetheless, belief in miracles is central to most of the world's major religious traditions:

- The Jewish faith is based upon the idea that, through history, God has often protected his chosen people by intervening miraculously. For example, in the book of Exodus in the Bible, there are the stories of God striking down the first-born of Egypt (Exodus 11) and enabling Moses to part the Red Sea in order to get the Hebrews across (Exodus 14) (see Figure 4.1).
- Muslims describe the writing of the Qur'an as God's greatest miracle (see Figure 4.2).
- Christianity stands or falls with belief in two doctrines – the **Incarnation** (this is the claim that Jesus of Nazareth was God made human) and the **Resurrection** (this is the claim that Jesus was raised from the dead on Easter morning after his crucifixion on Good Friday). Both doctrines are clearly claims that miracles occurred.

Besides these foundational miracles which are said to have happened in history, most of the world's religions also claim that miracles happen today. The claims of miraculous healings at the Catholic shrine of Lourdes are one quite well-scrutinised example (sixty-seven healings have been officially recognised as miraculous by the Catholic Church). And there are many others.



Figure 4.1 French School, *Moses crossing the Red Sea*, nineteenth century, colour engraving. Private Collection. Photo: © Archives Charmet/The Bridgeman Art Library.

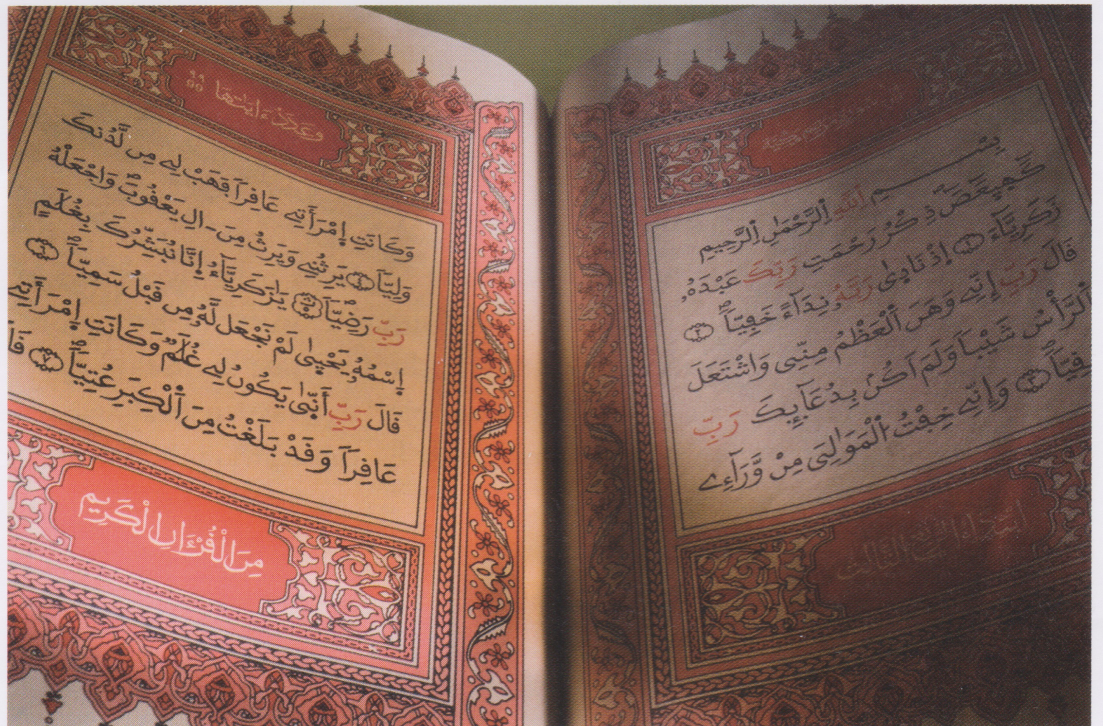


Figure 4.2 The Qur'an. Photographed by Ken Welsh. Photo: © Ken Welsh/Alamy.

Activity

We should start – as usual – by asking what we mean by the word ‘miracle’. It might be useful to refer to a dictionary again here. So first, write down your own brief definition of the word ‘miracle’. Then have a look in a dictionary to compare what it says.

Your definition:

Your dictionary’s definition:

Remember you can access the *Oxford English Dictionary* through the Open University Library website.

Discussion

I think any event would have to satisfy two conditions to count as a ‘miracle’. Firstly, it must be an event to which the normal methods of naturalistic scientific explanation fail to apply (that is, a **supernatural** event). Secondly, it must be an event which is reasonably seen as a *divine action*: an action in which God (or the gods) does something either directly or through a human intermediary.

Note well that both these conditions are needed for a miracle. Events which are extraordinary and inexplicable, but in which God is not reasonably seen as acting, are freaks or flukes, perhaps even magic; but they are not miracles. Events in which God is reasonably understood to be acting, but which are not necessarily supernatural, might be examples of what is called ‘providence’ (God’s providing for us) but are not examples of miracles. Unless both conditions are in place, we won’t have an argument from miracles for God’s existence. If only the first condition is in place, the proponent of the argument from miracles will have no ground to say that it is *God* who is at work in whatever extraordinary event she focuses on. If only the second condition is in place, she won’t be talking about an extraordinary event – she will just be claiming that God is at work in some ordinary event. That claim may or may not be plausible, but it is not part of the argument from miracles, and it may seem too easy for opponents of theism to produce explanations of ordinary events that do not involve God.

Given this basic understanding of what a miracle is, we are ready to turn to the best-known philosophical argument against the idea that miracles might be used to argue for God’s existence. This argument is David Hume’s. Hume has his own definition of ‘miracle’ – as we shall see as we look at Hume’s argument in detail.

Hume's main argument against miracles

Hume presents his case in his essay 'Of Miracles'. This is now usually printed as Section X of his *Enquiry concerning Human Understanding* (1748). Most of the essay is reproduced as Reading 7, 'Against Miracles', in Part VI in the set book.

The audio recording 'Hume on miracles' lasts about ten minutes – but you will need to listen to it more than once. You should allow about thirty minutes for this activity.

Activity

Before turning to Hume's text, listen to the audio recording 'Hume on miracles', which you can find on the *Exploring philosophy* website. This is an interview with the leading Hume scholar Peter Kail (whom you have already heard in the audio recording 'Hume on design'). Listen to the recording a couple of times and then have a go at answering the questions below.

This exercise is just to focus your mind on these questions. It's not supposed that you will already be able to give them definitive answers.

- 1 What does Hume mean by a miracle?
- 2 Why couldn't there be a miracle, according to Hume?
- 3 Peter Kail mentions three criteria that Hume thinks we should use to decide whether to accept a report of some extraordinary event. What are the criteria?
- 4 What does Hume mean by a 'proof versus proof'?
- 5 Why is Hume's argument so controversial?

Discussion

- 1 Peter Kail says that Hume defines 'miracle' in two ways: as 'the violation of a law of nature' and as 'the violation of a law of nature by the immediate interposition of the Deity' (1'24"). Maybe you think that the first of these two definitions is just an informal abbreviation of the second, so that there is no real difference between them. If so, you surely think rightly! The second is the full version, spelling out both conditions an event must satisfy in order to be a miracle.
- 2 On Peter Kail's reading, Hume is not arguing for the claim 'There can be no miracles'; rather, he is arguing for the claim 'It is never rational to believe a report of a miracle' (2'09").
- 3 Peter Kail (from 3'11") says that we need to know (1) how many people can be called as witnesses to a claim. (Suppose I say I saw a tiger in Shaftesbury Avenue, but no one else says they saw it – this makes my report pretty untrustworthy.) And we need to know (2) whether I have an interest in the claim I'm making – whether it is to my advantage for it to be believed. (Suppose I say that there was no

money in your purse, which I've had in my keeping for the last two hours. You might reasonably suspect my report as a biased one!) Later on in the interview (from 6'18"), Peter Kail also suggests a third criterion: (3) we need to know that the witnesses of any alleged miracle are reliable people, people of 'sufficient character' – not habitual liars or easily duped.

- 4 On Peter Kail's reading, what Hume means by 'proof versus proof' is the possible situation where we have a completely unbiased report of a completely incredible event – a miracle (4'43"). The completely reliable report is a proof that the miracle happened; the fact that it violates the laws of nature is a proof that it didn't.

But notice that, as Kail reads him, Hume regards this only as a *possible* situation. He thinks there *could* be a completely reliable report of a miracle, like the days of darkness in 1600 that he goes on to mention – but there never has been.

- 5 Hume's claim is highly controversial, because he says that no miracle has ever met the criteria that he suggests – that it should be witnessed by plenty of unbiased reliable witnesses. But the whole of the society Hume lived in was founded on the belief in the resurrection of Jesus. His claim that *no* miracle passed his tests clearly implied that the resurrection didn't pass those tests. So it implied a rejection of Christianity – in his day an unpopular and possibly even a dangerous stance to take (5'10"–6'10").

In this interview, Peter Kail offers his interpretation of Hume on miracles. Peter Kail is a well-respected scholar, but notice that his is only one reading of Hume. There might be others. In fact, I myself offer a slightly different reading of Hume on miracles (as we shall see) – and you yourself, when you have studied Hume, may end up disagreeing with both of us. This skill, of creating your own interpretation of a complex text, is crucial to doing philosophy.

As I read him, Hume's central objection to miracles can be summed up in a question: 'Which is less unlikely – that someone should have misinterpreted or misrepresented what they experienced? Or that a miracle should really have occurred?' We will now turn to Hume's text.

Activity

First, skim the whole of the reading 'Against Miracles' in the set book (Part VI, Reading 7). Try to get an overall impression of what Hume is saying. Make a note of anything that particularly sticks out for you.

Then read again, more carefully, from the start, on p. 371, as far as 'mutual destruction of belief and authority', at the top of p. 373. Hume's main argument against miracles is completed in this passage.

As you read each paragraph in this section (there are six of them), pause to think and write down a single sentence which at least roughly summarises what Hume is saying. Better still, you could try to find a single word or phrase which gives you the key to that paragraph. Use Table 4.1 to help you. At the same time, make a note of anything you find puzzling or don't understand.

Tip: If you don't understand a paragraph the first time, then don't worry; just re-read it. Of course, you may find you still can't work out what Hume is saying, even when you've read a paragraph several times. If so, don't worry; just put a question mark by it and try the next paragraph. (You should write this question mark in pencil. With any luck, you will not be puzzled long, and then you will want to rub out the question mark!)

Table 4.1 Hume's argument against miracles (1)

	Paragraph	Key word or phrase	Anything puzzling?
1	'Though experience ... moral evidence.'		
2	'A wise man ... superior evidence.'		
3	'To apply ... with us.'		
4	'And as the evidence ... its antagonist.'		
5	'The contrariety ... human testimony.'		
6	'Suppose, for instance ... belief and authority.'		

Discussion

In the first paragraph ('Though experience' to 'moral evidence'), the key phrase is *not altogether infallible*, which is what Hume tells us experience is. In one sentence, his point is that *if we want to tell what really happens from what does not really happen, then we have to rely on past experience – but past experience isn't always a perfect guide*. (Hume's own example of this point is the Indian prince who had never encountered ice before.)

In the second paragraph ('A wise man' to 'superior evidence'), the key word is *proportions*. Here Hume explains how we are supposed to 'rely on experience' to tell what really happens from what doesn't. His point is rather like the one that Philo makes in his objection to Subconclusion 2 of Cleanthes' version of the argument from design (see Chapter 2, Section 2.2). The point is that *the more often something has happened before, the more reasonable it is to expect it to happen now as well*.

In the third paragraph ('To apply' over page to 'with us'), the key word is **testimony**. Hume uses this word in a way that most of us don't usually use it now, to mean *others' reports*. Hume's point about testimony is a particular application of the general point that he makes in the second paragraph. His point is that *we continue to rely on others' reports because, and insofar as, we've found them reliable in the past*. (Hence his last remark in this paragraph. We usually rely on most people's testimony, because we've usually found them reliable. But we don't rely on the testimony of those who are 'delirious', or 'noted for falsehood and villainy', because such people are *not* reliable.)

In the fourth paragraph ('And as the evidence' to 'its antagonist'), the key word is again *proportion*. Hume here hammers home the message of the third paragraph: that *our reliance on others' testimony is directly proportional to how reliable we have found those other people in the past*.

In the fifth paragraph ('This contrariety' to 'human testimony') the key phrase is *several different causes*. Hume's point here is that *our evidence about the reliability of others' testimony can conflict in a number of ways*. It's not just that, in the past, other people's reports may have been correct sometimes, and sometimes wrong. A conflict in our evidence about their reliability (a 'contrariety', to use Hume's old-fashioned word) can arise from other sources, too.

And finally, in the sixth paragraph ('Suppose, for instance' to 'belief and authority'), the key word is *counterpoise* (meaning a weight which balances against another weight). Here, Hume finally pounces on the point that he's been building up to, in the following words:

But when the fact attested [by other people's reports] is such a one as has seldom fallen under our observation, here is a contest of two opposite experiences; of which the one destroys the other, as far as its force goes, and the superior can only operate on the mind by the force which remains.

To see what Hume means, consider the following example. Suppose my friend Derek reports an event to me: 'Tim, Tim, a cow has given birth to three calves at once!' Then, says Hume, I will ask two different sets of questions about what Derek reports (his testimony). One set of questions is about whether it's likely that Derek is reporting accurately and correctly. Is Derek a paragon of honesty and perceptiveness? Or is he a liar, mentally unstable, or easily duped? Does he know much about cows and their birth processes? Where did he get his information? Does he stand to gain from my believing him? And the other set of questions is about whether it's likely that what Derek reports has actually happened. Do cows *normally* have that many calves? Is it even possible for them? Hume's point is that, *for us to believe a report, it needs to be both a report from someone whom we can believe is accurate, and a report of something that we believe could possibly happen.* If either of these conditions is only partially met, this weakens our reason to believe the report. For the one judgement of likelihood that we make is 'counterpoised' (weighed) against the other.

We can explain this point further by contrasting four possibilities. We could be confronted by:

- 1 A likely witness to a likely event.
- 2 An unlikely witness to a likely event.
- 3 A likely witness to an unlikely event.
- 4 An unlikely witness to an unlikely event.

Suppose (1) we have a likely witness to a likely event. Here is an example: you're my trusty secretary, and you ring through to my office, as you do almost every day, to tell me that the visitors we've been expecting have now arrived. In this case, I almost certainly won't even stop to think whether what you tell me is true. I will simply accept that it is, and act accordingly. And in most cases, I'll be quite right to do so. As Hume might say: the likely event and the likely witness add up to make the witness's report as credible as it could possibly be.

But now suppose (2) we have an unlikely witness to a likely event. Maybe I've picked up someone else's copy of *The Daily Liar*, and am looking over it in an idle moment. The *Liar* is a despicable rag which barely deserves to be called a newspaper. It is packed with misleading insinuations, reckless inaccuracies, wanton slurs, and outright falsehoods. (*The Daily Liar* is my invention, but maybe you know real newspapers that remind you of it.) Nonetheless, on the front cover of today's *Daily Liar* it says that yesterday the Queen gave her annual speech at the state

opening of Parliament. I know that it's the time of year when the Queen's Speech happens, and I know that there's a Queen's Speech every year. Still, this likely claim occurs in the *Liar*. I conclude that it's *probably* true, but I am much more cautious about the claim than I would be if I'd read it somewhere else. As Hume might say: the untrustworthiness of the witness subtracts from the likeliness of the report.

Conversely, suppose (3) that we have a likely witness to an unlikely event. I know that you are an unusually wise and truthful person. In my experience you have never once made a mistake, and never once told a lie. Now you tell me that you've just seen the Prime Minister walking on his hands down Downing Street. That sounds crazy to me! All the same, *it's you reporting it*. I wouldn't take such a claim very seriously if any old person made it. But the fact that you are the witness greatly increases my inclination to believe this extraordinary report. As Hume might say: the trustworthiness of the witness increases the credibility of the report.

Finally there is case (4), where we have an unlikely witness to an unlikely event. Suppose my informant about the Prime Minister's hand-walk along Downing Street is not you, my most trustworthy source of all. Instead, it's *The Daily Liar*. In this case, I will just dismiss the report as yet more mendacious bunkum of the usual *Daily Liar* sort. In Hume's terms, I will say that the unlikely event and the unlikely witness add up to make this report as incredible as it could possibly be.

Credibility scores

Here is a way to make Hume's point using numbers. Suppose we give witnesses what we can call a **credibility score**. A trustworthy witness (like the secretary in my example above) attracts a positive credibility score, say +50; an untrustworthy witness (like *The Daily Liar*) attracts a negative one, say -30; a witness whom there is no more reason to believe than disbelieve gets a score of 0. And suppose we give events credibility scores, too. Likely events like the Queen's Speech get positive scores, say +60; unlikely events, like the Prime Minister walking along Downing Street on his hands, get negative scores, maybe -25; events that there is no more reason to think happened than didn't happen, get 0.

So suppose a likely witness tells me something unlikely: for example, my secretary tells me that the Prime Minister is walking along Downing Street on his hands. Such a report is a third kind of thing that can be given a credibility score: its score will be the sum of the witness's credibility score and the event's. Now $50 - 25 = +25$.

So since +25 is a positive credibility score, I have reason to believe that the PM is walking on his hands if my secretary tells me so. If, on the other hand, I read it in *The Daily Liar*, I have no reason to believe it. The event is unlikely in itself (it has a negative credibility score of -25). And the reporting source is not a trustworthy one (*The Daily Liar* has a negative credibility score of -30). So the credibility score of the *Liar's* report of the Prime Minister's hand-walking is -25-30, which is -55 overall. Conclusion: if I read about it only in *The Daily Liar*, I clearly have no reason at all to believe that the Prime Minister did his hand-walk.

What has all this to do with the question of miracles? In the next three paragraphs of his text, Hume completes his main argument against miracles by applying the point that we have just developed.

Activity

You should allow about twenty minutes for this activity.

Turn back to Reading 7, 'Against Miracles', in Part VI of the set book. Carefully read through the three paragraphs on p. 373, one after another, and, as before, identify a key word or phrase for each.

Table 4.2 Hume's argument against miracles (2)

Paragraph	Key word or phrase	Anything puzzling?
'But in order ... its antagonist.'		
'A miracle ... which is superior.'		
'The plain consequence ... or opinion.'		

Discussion

The seventh paragraph of the extract ('But in order' to 'its antagonist') is a crucial one – but tough going. The key phrase in it is *proof against proof*.

Hume's point here is simply an application of the model we have just developed. His point is that miracles are not just unlikely events, but *extremely* unlikely events. In fact they are so unlikely that, however much we usually trust the witness who reports a miracle, we still don't have

reason to trust his miracle report. Whatever positive credibility score the reporter may get, this is outweighed by the very big negative credibility score that his report of a miracle gets. Your confidence in the reporter can be as high as you like; your confidence in the miraculous event reported should still be so low that it cancels that out.

And why should your confidence in a report of a miracle be so low? Hume answers this question in the first sentence of the next paragraph.

In the eighth paragraph ('A miracle is' to 'which is superior'), the key word is *violation*:

A miracle is a violation of the laws of nature; and as a firm and unalterable experience has established these laws, the proof against a miracle, from the very nature of the fact, is as entire as any argument from experience can possibly be imagined.

What are 'the laws of nature'? They are those principles about what regularly happens in the world around us that have been *established by experience*. To give Hume's examples (from the same paragraph): 'all men must die ... lead cannot, of itself, remain suspended in the air ... fire consumes wood, and is extinguished by water'. According to Hume, 'a firm and unalterable experience' supports all four of these regularities. So our confidence in each of them should be very high indeed.

But a miracle, says Hume, would be a *violation* of the laws of nature that state these regularities. So our confidence that a miracle can happen should be extremely low, in fact virtually non-existent:

There must, therefore, be a uniform experience against every miraculous event, otherwise the event would not merit that appellation. And as a uniform experience amounts to a proof, there is here a direct and full proof, from the nature of the fact, against the existence of any miracle...

Even if we have a reporter of whom we are extremely confident, if that reporter reports a miracle, then what we will have will be an extreme form of case (3) above: that is, we will not just have 'a likely witness to an *unlikely* event' but 'a likely witness to an *incredible* event'. The likeliness of the witness is completely outweighed by the unlikeliness of the report. Miracles are so unlikely that not even the most trustworthy witness imaginable could be trustworthy enough to make the miracle report believable. This, on my reading, is what Hume means by his phrase 'proof against proof'.

Hence, in the ninth paragraph ('The plain consequence' to 'my belief or opinion') the key phrase is *more miraculous*. Hume triumphantly concludes:

The plain consequence is (and it is a general maxim worthy of our attention) 'That no testimony is sufficient to establish a miracle, unless the testimony be of such a kind that its falsehood would be more miraculous than the fact which it attempts to establish...

And that (concludes Hume) is why miracle reports can never be credible.

In summarising Hume's argument, I have drawn attention to a crucial connection between two ideas: *experience* and *laws of nature*. The connection is this: the *laws of nature* are those scientific principles which we believe in *because our experience always supports them*. To go back to Hume's examples: all men die; lead never, of itself, remains suspended in the air; fire always consumes wood, and is always extinguished by water; and so on. Why are these generalisations laws of nature? Because every experience supports them (says that they happen), and no experience ever contradicts them (says that they don't happen).

So if a miracle is a *violation* of a law of nature, this means that *all our experience contradicts it*. Thus even if our universal experience of some reporter is that he's always reliable in what he reports, still we have another universal experience – of the laws of nature – which tells us that, if he reports a miracle, *he must be wrong*. According to Hume, miracles are a type of events that experience always justifies us in thinking *can't* happen. But why does he think that?

Activity

Look back over Hume's argument, and identify his definition of 'miracle'. Now look back to the definitions that you wrote down earlier in the chapter: your own definition and the definition from a dictionary.

What are the differences between these definitions? How important do you think these differences are?

Discussion

This is how I defined 'miracle' earlier:

Any event would have to satisfy two conditions to count as a 'miracle'. First, it must be an event to which the normal methods of naturalistic scientific explanation fail to apply (that is, a supernatural event). Secondly, it must be an event which is reasonably seen as God acting, either directly or through a human intermediary.

And the first dictionary that came to my hands defined 'miracle' as 'an extraordinary, supernatural event; a marvel'.

As for Hume, his definition of 'miracle' is the one given above:

A miracle is a violation of the laws of nature.

(Hume (1748) in set book, p. 373)

There's an important difference between Hume's definition of 'miracle' and my earlier definitions. The difference becomes obvious when we remember Hume's definition of 'law of nature'. As we've seen, the laws of nature, according to Hume, are those scientific principles which we believe in because our experience always supports them. So:

A law of nature is a scientific principle which is never contradicted by our experience.

Or, as we might also say:

A law of nature is a scientific principle which is never violated.

Now put this together with Hume's definition of 'miracle', and notice the argument that we get. It has these two premises:

- PREMISE 1 If a miracle occurred, it would be a violation of the laws of nature.
- PREMISE 2 A law of nature is a scientific principle which is never violated.

Isn't it obvious what we can conclude from these two premises?

CONCLUSION

Miracles do not occur.

So for Hume, *it is a matter of definition that there are no miracles*. As he says himself in the eighth paragraph of the extract (already quoted): 'There must, therefore, be a uniform experience against every miraculous event, otherwise the event would not merit that appellation.' If some supposed event was not a violation of the laws of nature, we wouldn't call it a *miracle* in the first place. We would call it a prodigy, or a phenomenon, or something less than that.

(Here, by the way, you see the main difference between my reading of Hume on miracles and Peter Kail's view in the audio recording. On Kail's reading, Hume says that there could in principle be a credible report of a miracle – it's just that there never has been. On my reading, Hume says that even in principle no report of a miracle could be credible, because miracles are *by definition* incredible events. Which of us do you think has got Hume right? What is your evidence?)

So, on my reading, Hume thinks that the definition of 'miracle' implies that there are no miracles. But now suppose we change our definition of 'miracle'. What if we use the definition that my dictionary gave? Then we would get this argument (with an asterisk added to show that the first premise has been altered):

PREMISE 1* A miracle is an extraordinary, supernatural event, or a marvel.

PREMISE 2 A law of nature is a scientific principle which is never violated.

Just because an event is extraordinary, supernatural and marvellous, it doesn't have to be one that violates any laws of nature. So these premises do not give us a valid argument to the conclusion that there are no miracles.

Or again, suppose we change our definition of 'law of nature'. This time it is the second premise that has an asterisk added to show that it has been altered:

PREMISE 1 A miracle is a violation of the laws of nature.

PREMISE 2* A law of nature is a scientific principle which is very rarely violated.

These premises do give us a valid argument to an altered conclusion:

CONCLUSION* Miracles are very rare.

Many believers in miracles (Catholic and Jewish ones, for instance) would probably have no quarrel with that.

In short, then, the Premises (1) and (2*) do not give us a valid argument to the conclusion that, on my reading, Hume is after: that by definition, there are *no* miracles.

Activity

This completes our discussion of Hume's main argument against miracles. What do you think is the right conclusion to draw from all this?

- Is Hume's argument against miracles completely successful – does he leave you perfectly sure that miracles can't ever happen?
- Is Hume's argument against miracles completely unsuccessful – do you think he gives you no reason to think that miracles can't happen?
- Is Hume's argument against miracles successful *on certain conditions*?

Discussion

The right conclusion, I think, is the last one. Hume's main argument against miracles is successful, *on condition that* we accept both his definition of 'miracle' and his definition of 'law of nature'. But *should* we accept these definitions? Can a believer in miracles reject either or both of them? Or is there something about Hume's definitions that makes them rationally irresistible?

I will leave that question for you to think about further. Now, we will turn to the subsidiary arguments Hume makes against miracles in the rest of his text, together with two other arguments against miracles that can also be made.

Some further arguments against miracles

Activity

In the six paragraphs running from 'In the foregoing reasoning' (at the bottom of p. 373) to '[...] is said to have been committed ...' (towards the bottom of p. 375), Hume presents four subsidiary arguments against

You should allow about twenty minutes for this activity.

the possibility of miracles. (In the seventh and last paragraph of the reading, at the bottom of p. 375, he presents a useful brief restatement of his main argument.)

These four subsidiary arguments are much shorter and simpler than Hume’s main argument. Also, each one is helpfully signposted in the text with ‘*first*’, ‘*Secondly*’, ‘*Thirdly*’ and ‘*fourth*’! Using these signposts, pick out the four arguments, and write a short note of what each argument is about.

You can use Table 4.3 to help. Note that you don’t have to write much – maybe just a single word to remind you of the gist of each argument.

Table 4.3 Hume’s subsidiary arguments against miracles

Argument	Gist of the argument
1	
2	
3	
4	

Discussion

Here are the four arguments.

The first subsidiary argument (‘For *first*’ to ‘testimony of men’) is a simple extension of Hume’s main argument. Recall how I expressed this: even if the credibility score of a reporter of a miracle is a big positive number, still the credibility score of a *report* of a miracle has to be a very big negative number. Hume’s new point, in effect, is that in real life the credibility scores of actual reporters of miracles are not very high either:

there is not to be found, in all history, any miracle attested by a sufficient number of men, of such unquestioned good-sense, education, and learning, as to secure us against all delusion in themselves; of such undoubted integrity, as to place them beyond all suspicion of any design to deceive others; of such credit and reputation in the eyes of mankind, as to have a great deal to lose in case of their being detected in any falsehood; and at the same time, attesting facts performed in

such a public manner and in so celebrated a part of the world, as to render the detection unavoidable.

In the second subsidiary argument ('*Secondly*' to 'of this kind ...'), Hume adds that there is a perfectly good explanation of why people enjoy telling and believing miracle stories, which has nothing to do with the likelihood that those stories should be true: 'The passion of *surprise* and *wonder*, arising from miracles, being an agreeable emotion, gives a sensible tendency towards the belief of those events from which it is derived.'

In the third subsidiary argument ('*Thirdly*' to 'from human nature ...'), Hume argues that miracle reports lack credibility because they only originate among 'ignorant and barbarous nations'. (We can set aside Hume's prejudices here by rewriting his argument to say that miracle reports only originate in pre-scientific cultures. Or is that just swapping his prejudices for our own?)

Hume's fourth subsidiary argument ('I may add' to 'have been committed') is that miracle reports from different religions *cancel out*: 'in matters of religion, whatever is different is contrary'. Suppose one religion (say Hinduism) reports a miracle, and says that it is evidence for the truth of Hinduism, while another religion (say Christianity) reports another miracle, and says that it is evidence for the truth of Christianity. Then, says Hume, as each miracle's 'direct scope is to establish the particular system to which it is attributed, so it has the same force, though more indirectly, to overthrow every other system'. If the Hindus are right about their miracle, that undermines Christianity. But if the Christians are right about *their* miracle, that undermines Hinduism. And if both the Christians and the Hindus are right, that undermines *both* systems.

There are two other arguments against miracles that Hume does not make much of here, but which deserve a mention. We can call them the arguments from *silliness* and from *selectiveness*.

Silliness

Hume himself hints at this argument, though he doesn't label it as a separate point. Some miracles, says Hume, 'detect themselves by their absurdity'. Hume means that some miracle stories are so ridiculous that we can tell as soon as we hear them that such things almost certainly did not happen, or, if they did happen, were not really miracles. And I think Hume is right about this. Some miracle reports, I would say, are

just too silly to be taken seriously. (Maybe others wouldn't say so, but this is certainly what I would say.)

Take a look on the internet for yourself, and form your own view on what I'm calling the silliness objection. For example, try searching for 'aubergine seeds name of Allah', or 'Madonna statue weeping blood'. When you do, you will very probably find yourself reading newspaper stories that go something like these:

Miraculous aubergine

The home of Mr and Mrs X has recently been inundated with about fifty visitors a day, coming to see their miraculous aubergine [see Figure 4.3]. Mrs X foresaw the miracle in a dream after she'd bought the aubergine from their local shop. On slicing the vegetable in half, she saw that the seeds were formed in the Muslim symbol 'Ya-Allah', meaning 'Allah is real'. Mr X said: 'I felt so excited I ran round to the priest and he confirmed that it was indeed a miracle.' Mullah Y, priest of the local mosque, said: 'In all my 40 years as a priest, I have never witnessed anything like this. It is wonderful for the community, and for Mr and Mrs X.' When the aubergine has been displayed for several weeks in the mosque it will be divided into small pieces and shared among the faithful.

Weeping Madonna

According to the Catholic faithful in Z-town, a six-inch-high porcelain statue of the Virgin Mary has begun weeping tears of blood [see Figure 4.4]. According to scientists the liquid staining the image really is blood, and human at that. The Z-town coroner's office pronounced the substance is type O-4 human blood. The statue weeps regularly, particularly in the presence of children.

The small blue and white porcelain statue belongs to Mrs A, a housewife from the working class side of Z-town. Since 14 November, when the tears of blood were seen for the first time, the modest home of Mrs A has become the main attraction for residents of the district. The Church has refused to take up a position concerning this strange phenomenon.

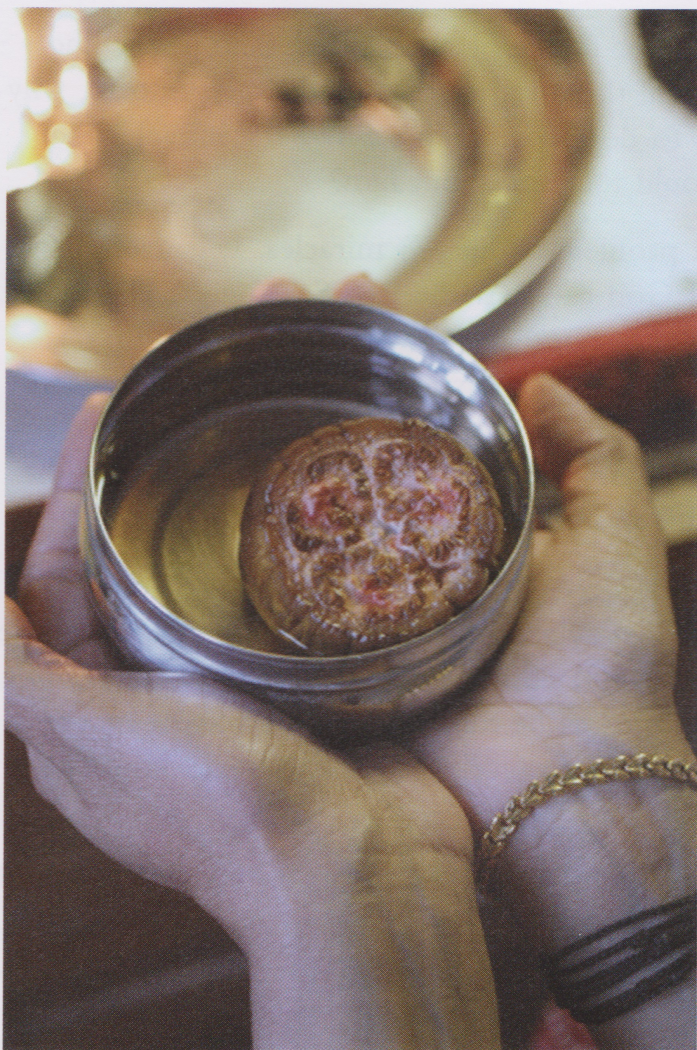


Figure 4.3 The holy aubergine of Hendon. Photographed by Peter Beal. Photo courtesy of the *Hendon Times*.



Figure 4.4 Weeping Virgin Mary, Caracas, Venezuela. March, 2003. Photographed by Kimberly White. Photo: © Kimberly White/Getty Images.

The main argument about silly miracles is, as Hume says, that such reports ‘detect themselves by their absurdity’. Just from the bizarreness of such stories, we can be reasonably sure that they rest on lies, or delusions, or misunderstandings, or all three. But silly miracles raise another problem, too, for believers in God. What if such bizarre things *do* happen, and really are caused by God? What do such absurd events say about the God who causes them?

Selectiveness

This question brings us to the last argument against miracles, the argument from selectiveness. As a problem about silly miracles, the problem of selectiveness arises from this question: Why would an omnipotent and perfectly good God be more interested in mucking

around with aubergine seeds or making statues bleed than in keeping Boeing 747s in the air? Of all the miracles that God *could* perform, why on earth would he choose to do those? If those *were* the miracles that God chose to do, what would that say about him?

This problem is not just a problem about *silly* miracles. It is a problem about any miracle at all. If God can part the Red Sea for the children of Israel (more than 600,000 in number according to Exodus 12:37), why can't he hold back the Boxing Day tsunami of 2004 (which killed at least 300,000 people)? If God can raise Lazarus or Christ from the dead (John 11, John 20), why do so many others die, often despite the urgent prayers of their families and friends?

To believe in miracles at all is necessarily to believe that God acts in a mysteriously selective way. That selectiveness may not, all on its own, be a reason for refusing to believe in miracles. But it is certainly a reason why even a believer who thinks, as he might, that miracle reports are a serious part of the case for belief in God's existence should find something puzzling about them.

However, it's possible that none of these arguments against miracles will worry the theist in the slightest. For as noted at the beginning of the chapter, not all theists believe in miracles anyway. Even for those theists who do believe in miracles, some of these arguments will not be very worrying. For instance, good Catholics will probably just agree with Hume that many reported miracles are indeed just plain silly, and that the 'agreeable emotions of surprise and wonder' that Hume mentions do indeed have a tendency to make people want to believe miracle reports that they don't really have much reason to believe. That (they will say) is why the Catholic Church is so careful about examining the evidence before accepting that a miracle has happened as a result of the invocation of a saint.

Other arguments from among these six will need to be taken more seriously by believers in miracles. In particular, there are three of Hume's arguments that they will need to dispute.

Activity

Have a look at Table 4.4 which lists three of Hume's subsidiary arguments against miracles. How do you think a believer in miracles might try to counter these arguments?

Jot down your thoughts in the right-hand column before reading the discussion below.

Table 4.4 Countering Hume's arguments

Hume's argument	Your comments
The <i>first</i> argument: that our actual evidence for miracles is very poor.	
The <i>third</i> argument: that miracle reports are found less and less, the less 'ignorant and barbarous' people are.	
The <i>fourth</i> argument: that evidence for miracles in different religions 'cancels out'.	

Discussion

One thing to remember here is the distinction I made in Chapter 1 between philosophical and non-philosophical questions. The first argument, it might be said, does not raise a philosophical question. It raises a question about the quality of our historical evidence, which is a historical issue, not a philosophical one. (Anyone who does say this should remember Hume's main argument against miracles: is good historical evidence really *all* we need to make a miracle report credible?)

The third argument too might be described as a non-philosophical argument. It might be said that examining the distribution of miracle reports over time and place is a project in history and/or sociology, but not philosophy.

This also raises a factual question, about what claims the different religions say are supported by the miracles they allege. If every religion in the world only claimed that its miracles were evidence that 'there is some mysterious higher power', then – despite what Hume says – the miracles in the world's different religions would *not* cancel out. For every religion (or almost every religion, if Buddhism is a religion for atheists) says there is such a power.

We shall not take these issues further here. Instead, in the last section of this chapter, we are going to consider an argument for God's existence that is closely connected to the argument from miracles. This is the argument from religious experience.

4.3 Religious experience

I say the argument for God's existence from religious experience is 'closely connected' to the argument from miracles. In fact, there are two big connections between the topics of religious experience and of miracles.

Connections between religious experience and miracles

One big connection is that, if religious experiences really are experiences of God, then they *are* miracles. To see this, recall my definition of 'miracle' in the last section. On that definition, a miracle is (1) an event to which the normal methods of naturalistic scientific explanation fail to apply, and (2) an event in which God is reasonably seen as acting. If religious experiences are really experiences in which God (or something supernatural) is reasonably seen as acting (to make us aware of him), then they will be events to which the normal methods of naturalistic scientific explanation fail to apply. So if there are genuine religious experiences, experiences which really are experiences of God, they will themselves be miracles.

Hence the other big connection. Because every case of genuine religious experience (if there are any) is a case of a miracle, most of the questions that we have already considered about miracles also raise interesting issues about religious experience – as we shall see.

Activity

The audio recording 'Religious experience' lasts about ten minutes – but you will need to listen to it more than once. You should allow forty minutes for this activity.

First, you should listen to the audio recording 'Religious experience' (available on the *Exploring philosophy* website). In this recording, I interview Keith Ward, who you have already heard speaking in the debates on 'Faith and reason' and 'The problem of evil'.

Before you start, have a go at defining 'religious experience' for yourself. (Note that there are obvious clues about this in the first two paragraphs of this section.)

Now listen to the recording and try to answer the following questions. As before, don't worry if you don't yet have definitive answers; this is just a warm up.

- 1 How does Keith Ward define religious experience?

- 2 Does Keith Ward endorse the argument for God's existence that runs 'God speaks to me, therefore God exists'?
- 3 How does Keith Ward respond to my Aztec objection (as we might call it)?
- 4 How does Keith Ward suggest we might tell apart religious experience and mental illness, or stimulations of the brain such as Persinger has experimented with?
- 5 What does Keith Ward say about religious experiences in other religions?
- 6 It seems that some people have religious experiences and others don't. What does Keith Ward say about why this apparently happens?

Discussion

- 1 This is a trick question! Keith Ward doesn't define religious experience. He quotes the well-known researcher of religious experience, Alister Hardy, who was willing to accept an extremely broad account of what might be classed as religious experience that included, not just a sense of the 'personal presence' of God, but also almost any experience of something wonderful, exceptional, or of morally positive value (0'15"). And he offers some of his own religious experiences, as a Christian, 'of the presence of Jesus' as examples of religious experience (1'49").
- 2 No, Keith Ward doesn't endorse the argument 'God speaks to me, therefore God exists'(2'51"). He thinks we can be wrong about whether God speaks to us, and that there can be tests for telling whether any religious experience is likely to be genuine. Ward's tests are the test of *morality* (a genuine religious experience should make you a better person, not a worse one) and *the peer group* (a genuine religious experience ought to square with what others in your religious peer group or tradition have experienced).
- 3 My Aztec objection is about the practice of child sacrifice among the Aztecs (3'37"). The Aztec priests used sharp knives to peel the skin off terrified infants, then stabbed them to death, to appease the gods that the Aztecs believed in. I take it that this was a pretty horrifying thing to do. But surely there was a peer group among the Aztecs who thought, quite possibly on the basis of religious experience, that their child sacrifices were *right*.

Keith Ward's response is to concede that religious experience is culturally bound. If he had lived in the Aztec culture, maybe child sacrifice would have seemed right to him, too. We can't ever be sure that we can get hold of truths, religious or moral, that go beyond our own tradition. As the contemporary Catholic philosopher Alasdair MacIntyre has argued, 'Truth is tradition-constituted.' If a religious

Persinger's 'God helmet' is discussed later in this chapter.

experience seems to be in conflict with our moral values, then we have to ask whether it just contradicts them, or also suggests a way of going beyond them to improve them. Here Ward refers to Jesus's words, 'I did not come to destroy the Law but to fulfil it' (Matthew 5:17), to suggest that Jesus was an example of someone whose teaching conflicted with the moral standards of the time, but in a way that went beyond those moral standards to improve them (5'35").

- 4 Keith Ward says that religious experience is not at all like mental illness, because mental illness is completely debilitating (6'14"). And it's not like the kind of experiences that someone might have with the Persinger 'God helmet' on, because we know that those experiences are (as Winifred Robinson puts it) 'not religious experiences', but 'helmet experiences' (8'30").
- 5 Keith Ward points out that every experience comes with an interpretation, and that different religious backgrounds suggest different interpretations (9'02"–9'39").
- 6 There are also those who don't have any religious background at all. Keith Ward says that, in some cases, people like this may well have exactly the same experiences as religious believers, but just interpret them differently and not in a 'religious' way (10'07"–11'23").

You shouldn't have found it too hard to define religious experience at the beginning of the last activity. A religious experience is an experience which seems to be an experience of God (or of an angel, or saint, or other spirit – but we shall concentrate here on religious experiences involving alleged awareness of God). There are millions of reports of such religious experience. Here are four examples:

These two quotations come from *The Varieties of Religious Experience* by William James (1842–1910).

God is quite real to me. I talk to him and often get answers. Thoughts sudden and distinct from any I have been entertaining come to my mind after asking God for his direction. Something over a year ago I was for some weeks in the direst perplexity. When the trouble first appeared before me I was dazed, but before long (two or three hours) I could hear distinctly a passage of Scripture: 'My grace is sufficient for thee.' Every time my thoughts turned to the trouble I could hear this quotation. I don't think I ever doubted the existence of God, or had him drop out of my consciousness. God has frequently stepped into my affairs very perceptibly, and I feel that he directs many little details all the time.

But on two or three occasions he has ordered ways for me very contrary to my ambitions and plans.

(quoted by James, 1902, Lecture 4)

I have on a number of occasions felt that I had enjoyed a period of intimate communion with the divine. These meetings came unasked and unexpected, and seemed to consist merely in the temporary obliteration of the conventionalities which usually surround and cover my life. ... Once it was when from the summit of a high mountain I looked over a gashed and corrugated landscape extending to a long convex of ocean that ascended to the horizon, and again from the same point when I could see nothing beneath me but a boundless expanse of white cloud, on the blown surface of which a few high peaks, including the one I was on, seemed plunging about as if they were dragging their anchors. What I felt on these occasions was a temporary loss of my own identity, accompanied by an illumination which revealed to me a deeper significance than I had been wont to attach to life. It is in this that I find my justification for saying that I have enjoyed communication with God.

(James, 1902, Lecture 4)

God has been profoundly real to me in recent years. In the midst of outer dangers I have felt an inner calm. In the midst of lonely days and dreary nights I have heard an inner voice saying 'Lo, I will be with you'. When the chains of fear and the manacles of frustration have all but stymied my efforts, I have felt the power of God transforming the fatigue of despair into the buoyancy of hope. I am convinced that the universe is under the control of a loving purpose, and that in the struggle for righteousness man has cosmic companionship. Behind the harsh appearances of the world there is a benign power.

(King, in Washington, 1986, p. 40)

This quotation comes from Martin Luther King, Jr (1929–1968), an American pastor and civil rights activist.

This quotation is 'The Memorial' of Blaise Pascal (1623–1662), a French mathematician and philosopher, and author of the *Pensées*. 'The Memorial' is a piece of paper in Pascal's own writing which was found sewn into his clothing when he died.

The year of grace 1654. Monday, 23 November, feast of Saint Clement, Pope and Martyr, and of others in the Martyrology. Eve of Saint Chrysogonus, Martyr and others. From about half past ten in the evening until half past midnight.

Fire.

'God of Abraham, God of Isaac, God of Jacob,' not of philosophers and scholars.

Certainty, certainty, heartfelt, joy, peace. God of Jesus Christ. God of Jesus Christ. *My God and your God*. 'Thy God shall be my God.' The world forgotten, and everything except God. He can only be found by the ways taught in the Gospels. Greatness of the human soul. 'O righteous Father, the world had not known thee, but I have known thee.' Joy, joy, joy, tears of joy. I have cut myself off from him. *They have forsaken me, the fountain of living waters*. 'My God wilt thou forsake me? Let me not be cut off from him for ever! And this is life eternal, that they might know thee, the only true God, and Jesus Christ whom thou hast sent.' Jesus Christ. Jesus Christ. I have cut myself off from him, shunned him, denied him, crucified him. Let me never be cut off from him! He can only be kept by the ways taught in the Gospel. Sweet and total renunciation. Total submission to Jesus Christ and my director. Everlasting joy in return for one day's effort on earth. *I will not forget thy word*. Amen.

(Pascal, in Krailsheimer, 1966, pp. 309–10)

Activity

Have *you* experienced anything like these four writers report? Has anyone you know experienced anything like this?

Discussion

That was quite a personal question. You are most certainly not expected to answer it in any public way! And if you find it an uncomfortable question, you are not alone. Many people, among them most of those who have had strong religious experiences, have felt uncomfortable about being questioned about them – either because they regard the experiences as too private to talk about, or because they think that no words can do them justice, or because they are worried about appearing

boastful or crazy or both. (It is interesting here to speculate about the reasons why Pascal might have sewed 'The Memorial' into his clothing.)

Still, whether you answer it publicly or privately, the question has got to be worth asking. For if you *have* experienced anything like that, or know anyone who has, this will give all the more point to our next question: What are we to make of all these reports of religious experience?

One obvious thing to make of them is an argument for God's existence. The basic form of this is the exceedingly simple argument that I sketched at the beginning of this chapter.

If people experience God, then God exists. People do experience God. So God exists.

On this argument, religious experience is just like perception – seeing or hearing or smelling or feeling things in the world around you. You can know that there's a book or a computer in front of you, because you can perceive it. Similarly, according to this argument, you can know that God is there, because you can experience him: 'As to God, open your eyes – and your heart, which is also a perceptive organ – and you see him' (C.S. Peirce, quoted in Taliaferro, 1998, p. 267).

Activity

Do you think an argument this simple can be made to work? Where do you think there might be problems with it?

Discussion

The most obvious problems with this argument have to do with the ways in which religious experience is *not* like ordinary perception. Two contrasts are particularly obvious:

Contrast 1: Usually, if you and I are in the same place at the same time, and our five senses are working well, then if you perceive ordinary objects, so will I. By contrast, if you and I have the same religious experience at the same time and place, that is quite unusual.

Contrast 2: Ordinary perception is of objects known to science. The book or computer that you see or touch is visible and tangible because of properties that a scientist can explain. By contrast, perception of God, if it happens, is of something quite mysterious, and completely outside science. There is a perfectly good scientific explanation of seeing or

feeling a book; there is no scientific explanation at all of religious experience.

Neither of these contrasts is denied by people who believe that religious experience really is of God (as I shall call them here, ‘believers in religious experience’). On Contrast 1, they might deny that religious experience is as selective as it appears to be. This is Keith Ward’s line, in the audio recording: he suggests that, actually, there is a lot of religious experience which simply isn’t recognised *as* religious experience.

Alternatively, believers in religious experience might admit that religious experience happens *selectively* – in something like the way in which miracles happen selectively (see ‘Some further arguments against miracles’ in the previous section). As with miracles, this selectiveness is certainly a puzzle: if God exists, why doesn’t *everybody* experience him? But, believers in religious experience who take this line may say, it doesn’t leave religious experience completely out on a limb: after all, some people are capable of musical experience in ways that other people just aren’t, because of their ‘tin ear’.

This analogy with the selectiveness of musical experience can be questioned. It seems much more unfair that experience of God should be unevenly distributed than that musical experience should be. Whether or not the analogy can be sustained, the selectiveness of religious experience isn’t in itself a reason to deny the whole phenomenon of religious experience, as opposed to admitting that in some ways the phenomenon is mysterious.

As for Contrast 2, believers in religious experience are quite happy to agree that religious experience is of something quite unknown to science. That, they will say, is the whole point!

Non-believers in religious experience can go two ways with Contrast 2. On the one hand, they can *accept* the contrast, and see that as a reason for doubting that religious experience is of anything real. If religious experience can’t be made sense of by science, they may say, then it can’t be made sense of at all. (This line of thought is analogous to Hume’s main argument against miracles. Hume tells us to doubt the reliability of any report that contradicts the ‘laws of nature’ that our experience has taught us. Those principles are, basically, the principles of science.)

Alternatively, non-believers in religious experience may *deny* Contrast 2. They may say that in fact there is a perfectly good scientific (and non-religious) explanation of religious experience. They may say, for instance, that what we call 'religious experience' comes from excesses of certain hormones, or suppressed childhood hysteria, or stimulation of particular parts of the brain, or whatever. (Compare Hume's second subsidiary argument against miracles, that there is a perfectly good explanation of why people believe in miracles which doesn't force us to believe that they're *right* to believe in them.)

The God helmet

One striking recent example of this line of thought is the 'God helmet' experiments conducted by the contemporary American neuroscientist Michael Persinger.



Figure 4.5 The 'God helmet', designed by Michael Persinger. Photographed by Vivien Hoang, Laurentian University, Canada. Photo: © Vivien Hoang.

In these experiments, a scientific device known as a Transcranial Magnetic Stimulator was used to send chaotic electrical discharges into the temporal lobes of the brain (see Figure 4.5). In at least some subjects, the result was that they seemed to experience

hallucinations that bore a striking resemblance to the mystical experiences of traditionally revered figures such as St Paul and Moses.

As with any scientific experiment, we must ask here: what does this experiment prove? Some people think that it proves that religious experience is nothing more than electrical stimulation of the brain. But presumably a believer in religious experience can deny this. (In the audio recording ‘Religious experience’, Keith Ward does deny it.) He will say that religious experience is electrical stimulation of the brain, *caused by God* (just as seeing a chair is an electrical stimulation of the brain, *caused by the chair*).

The parallels between the arguments

If you have been keeping track of the parallel between the arguments against miracles and the arguments against religious experience, you will have noticed that we have three parallels so far (outlined in Table 4.5).

Table 4.5 Parallels between arguments against miracles and against religious experience (1)

Argument against miracles	Parallel argument against religious experience
Hume’s main argument against miracles	The argument that religious experience should be rejected because it doesn’t fit into science
The argument from selectiveness against miracles	The argument from selectiveness against religious experience
Hume’s second subsidiary argument – we can explain belief in miracles without having to suppose they actually happen	The argument that religious experience has a complete scientific and non-religious explanation

Activity

Now have a look back at Section 4.2 and consider these two questions:

- What were Hume’s other arguments against miracles?
- Can you see how to work out the parallel argument against religious experience?

In Table 4.6, write down the other arguments that Hume made against miracles. Jot down next to them what a parallel argument might be.

Table 4.6 Parallels between arguments against miracles and against religious experience (2)

Argument against miracles	Parallel argument against religious experience

Discussion

The other arguments about miracles were Hume's first, third and fourth subsidiary arguments against miracles, plus the argument about silliness.

The argument about *silliness* clearly does have a parallel with religious experience. Some people report very strange religious experiences indeed. Some of these reports are just silly, sentimental or self-serving (or all three) – on a par with the reports of alien abduction or visitations from Elvis that we often hear of.

Other reports of religious experience are more sinister: John Lennon's murderer, Mark Chapman, said he heard the devil telling him to kill Lennon, and the 'Yorkshire Ripper', Peter Sutcliffe, claimed to kill prostitutes on God's orders.

But what is proved by the possibility of silly or sinister religious experiences? Here are three possible answers to that:

- 1 If religious experience can lead us to wickedness like Chapman's or Sutcliffe's, then we are better off avoiding it altogether.
- 2 Genuine religious experience comes to all sorts of people. The ones who are wise and good use that experience in ways that add to their wisdom and goodness; the ones who are evil and crazy do evil and crazy things with it.
- 3 Silly or sinister religious experiences cannot be genuine, because a God who is infinitely wise and infinitely good cannot be the cause of either.

I will leave you to think about which of these possible answers attracts you most (if any of them does).

As for Hume's other subsidiary arguments about miracles, they were these:

- the first argument, that our actual evidence for miracles is very poor
- the third argument, that miracle reports are found less and less, the less 'ignorant and barbarous' people are
- the fourth argument, that evidence for miracles in different religions 'cancels out'.

What happens if we replace the word 'miracles' in these arguments with the words 'religious experience'?

There is not much to be said for the claim that 'Our actual evidence for religious experience is very poor.' At any rate, we certainly have a huge amount of evidence that religious experience occurs. As I noted above, millions of people claim to have had religious experiences. You yourself may be one of them. Whatever other problems there may be about religious experience, lack of evidence is not the problem. The problem is rather whether these experiences really are what many of them seem to be – experiences of God.

Nor is it particularly convincing to suggest that religious experience happens more among those who are 'ignorant and barbarous' (or, if you prefer, those who don't live in sophisticated and scientifically literate cultures). Whether this is true is not a philosophical question (see the first chapter of this book). But in any case, it isn't true. The United States, for instance, is one of the most sophisticated and scientifically literate cultures in the world. It also has one of the highest proportions of people who claim to have had religious experiences.

This only leaves the argument that the evidence for religious experiences in different religions 'cancels out'. This needs a bit more attention than the last three.

Does the evidence for religious experiences 'cancel out'?

It is an obvious point that different sorts of religious experience occur in different sorts of religious tradition: Christian religious experience is typically of Jesus, or the Holy Spirit, or of God the Father (or of Mary or the saints or angels); Muslim religious experience is typically of Allah or his many 'prophets' (messengers); Hindu religious experience is typically of Ganesh, or Krishna or Vishnu, or any of the other myriads

of Hindu deities; and so on. Religious experience is widely divergent in its forms, and these forms are usually fully in line with the cultural and doctrinal background within which the religious experiences occur. (When English-speakers 'hear God', he speaks English to them, too.)

Everyone can agree that religious experience is invariably culturally modulated (remember what Keith Ward says in support of this claim in the audio recording). Whether the cultural modulation of religious experience is evidence that it isn't genuine is less clear. An atheist might say that the cultural variations in religious experiences show that the content of such experiences is entirely made up by humans, without any divine input at all. A theist might say that God takes the trouble to communicate with us in our own terms. It's not clear that either side has a decisive advantage here.

Nor does either side of the debate gain a decisive advantage by pointing out, truly enough, of course, that religious experience is bound to involve interpretation. As often elsewhere in life, we may start with a vivid and gripping visionary moment. But even for someone who thinks that in his visionary moment he had hold of something real, there is always hard work to be done in trying to work out what (if anything) that visionary moment means, or where (if anywhere) it gets him. Up to this point, the atheist and the theist need have nothing to disagree on. Beyond it, however, very different reactions are possible to all this divergence and disagreement in the religious experience of humanity.

Some will think that all the phenomena of religious experience reveal is evidence for some reductive theory of religion, like that of Sigmund Freud (who thought that religion was a kind of fantasy of wish-fulfilment), or Friedrich Nietzsche (who thought that religion was a way of compensating for our lack of real power over the world by pretending to have that power), or Karl Marx (who thought that religion was 'the sigh of the oppressed soul', 'the opiate of the masses').

Others will think that discernment will take us, eventually, in the direction of a choice between the different religions – that there is reason to think one of them decisively and completely true, and the others decisively and completely false.

Others again will think that, to make sense of religious experience of humanity, what we need above all is for members of the different religions and of none simply to listen to each other. We need to take each others' reports from the edge of the knowable seriously. Both theists and non-theists need always to follow the advice that Oliver

Cromwell gave to the Scottish Presbyterians, in a letter he wrote in August 1650, 'to think it possible we may be mistaken', and entirely probable that, even if we have hold of *some part* of the truth, we surely don't have hold of all of it.

Or, in the word of the American poet John Godfrey Saxe (1816–1887):

The Blind Men and the Elephant

It was six men of Indostan
To learning much inclined,
Who went to see the Elephant
(Though all of them were blind),
That each by observation
Might satisfy his mind.

The First approached the Elephant,
And happening to fall
Against his broad and sturdy side,
At once began to bawl:
'God bless me! but the Elephant
Is very like a wall!'

The Second, feeling of the tusk,
Cried, 'Ho! what have we here
So very round and smooth and sharp?
To me 'tis mighty clear
This wonder of an Elephant
Is very like a spear!'

The Third approached the animal,
And happening to take
The squirming trunk within his hands,
Thus boldly up and spake:
'I see,' quoth he, 'the Elephant
Is very like a snake!'

The Fourth reached out an eager hand,
And felt about the knee.
'What most this wondrous beast is like
Is mighty plain,' quoth he;
'Tis clear enough the Elephant
Is very like a tree!'

The Fifth, who chanced to touch the ear,
 Said: 'E'en the blindest man
 Can tell what this resembles most;
 Deny the fact who can,
 This marvel of an Elephant
 Is very like a fan!'

The Sixth no sooner had begun
 About the beast to grope,
 Than, seizing on the swinging tail
 That fell within his scope,
 'I see,' quoth he, 'the Elephant
 Is very like a rope!'

And so these men of Indostan
 Disputed loud and long,
 Each in his own opinion
 Exceeding stiff and strong,
 Though each was partly in the right,
 And all were in the wrong.

So oft in theologic wars,
 The disputants, I ween,
 Rail on in utter ignorance
 Of what each other means,
 And prate about an Elephant
 Not one of them has seen.

(Saxe, 1873, pp. 77–8)

Summary

In this chapter we have considered in detail a wide variety of arguments for and against miracles, and for and against religious experience. Some philosophers, like David Hume, think that there is serious doubt about whether miracles or religious experiences are even possible. We have seen ways in which such arguments (including Hume's) can be criticised.

By this stage, you should be feeling more confident about recognising the shape of an argument – identifying its premises, its subconclusions (if any) and its main conclusion – and then evaluating it by examining the premises for truth and the inferences for validity.

Where does this leave us, now we have reached the end of this book? Do you think it remains possible that we might get evidence of God's existence from miracles or religious experience, or via the other kinds of argument for God's existence that we have considered in the earlier chapters?

That, of course, is for you to decide. And the decision is not necessarily an easy one: as in other areas of philosophy, there are very good philosophers who take very different views about the philosophy of religion. But I hope it's clear by now that the decision between these different views does not have to be a random or groundless choice. After all, what makes *good* philosophers is that they have *reasons* to support their different views. I hope that this book has encouraged you, too, to find views about the philosophy of religion that you believe, not just because you *want* to believe them, but because you can support them with reasons.

Activity

You can use the quiz on the *Exploring philosophy* website to revise this chapter.

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Glossary

agnosticism

The view that the evidence for and against God's existence is indecisive, so that we should suspend our judgement about whether he exists.

Aquinas's 'Second Way'

The second of the 'Five Ways' of arguing for God's existence that are presented by Thomas Aquinas. The argument infers the existence of God from the fact that there are orders of causes in the world, which must have started somehow.

argument

In philosophy, an argument consists of a **premise** or, more usually, two or more premises taken together, from which a **conclusion** is inferred. For example: 'All men are mortal; Socrates is a man; therefore Socrates is mortal.' The premises are intended (by the person offering the argument) to give us reason to accept the conclusion, and in a good argument they do.

argument by analogy

An argument which works by saying: 'These two things are alike in this one respect; so they should be alike in that other respect too.' Argument by analogy is useful, but it goes wrong sometimes – it is not a **valid** form of argument.

argument from design

The claim that there is design in the world, of which God must be the cause, or is the likeliest cause. Also known as the argument *for* design, or the teleological argument.

assumption

A claim which is made in the course of an argument without being proved in that argument; *see* **premise**.

atheism

The view that there is no God.

biological information

The kind of 'instructions' for building biological systems such as animals that are carried in such materials as DNA.

conclusion

What an argument proves, or supposedly proves. For example, in the argument 'All men are mortal; Socrates is a man; therefore Socrates is mortal', the conclusion is that Socrates is mortal. (*See also*

subconclusion.)**cosmological argument**

The argument that since the world exists, it must have been created by God.

credibility score

A notional numerical measure of how much reason we have to believe some witness, or the reported event that he or she witnesses.

deists

Deists held a 'rationalised' version of Christian religious belief (known as 'deism'). Popular in the seventeenth and eighteenth centuries, deism rejected doctrines based on revelation, and restricted itself to what (according to the deists) could be established by reason: namely belief in a creator God who instils a sense of morality in us.

design

Intentional construction with a purpose in mind.

Epicurus' riddle

The argument that at least one of the following claims must be false: (1) There is a perfectly loving God; (2) God is perfectly powerful; (3) Evil exists. Perhaps the neatest way of expressing the **problem of evil**.

evidence

Whatever gives you good (though not necessarily conclusive) reason to believe some claim or other.

evolution

Evolution by natural selection is a theory of the process whereby successive generations of living creatures become better adapted for survival under conditions of difficulty and scarcity. Members of the same species differ from one another in random ways. These differences make some more able to survive ('fitter') than others. Those that survive longer are more likely to reproduce and so pass on their heritable characteristics to their offspring. In this way, according to the theory, over long periods of time subsequent generations are born better adapted to survive in their environment.

fideism

The view found in Kierkegaard, William James, and others, that it is misguided to argue or reason for God's existence, which should rather be accepted on trust or by 'a leap of faith'.

fine-tuning

The claim that there is evidence for God's existence in the fact that for the universe (or other phenomena, e.g. life) to come into being in the first place, certain things had to be 'just right'. *See* **Goldilocks**

Principle.

free will defence

The answer to the **problem of evil** which says that there is evil in the world because God created humans (or other beings) who were free to choose good or evil.

functionality

Something is functional when it is designed to perform a function, as, for example, a watch is designed to perform the function of telling us the time.

future-hope defence

The answer to the **problem of evil** which says that the evil in the world will be made sense of by God at some time in the future.

God

The supreme personal being who (according to theists) exists beyond the world, the creator and ruler of the universe.

Goldilocks Principle

The principle in cosmological physics that to get a universe going, the conditions have to be neither too much, nor too little, but 'just right'.

implicit

A premise or subconclusion is left implicit (or 'tacit') if it is needed for the argument to work but the person presenting the argument does not state it explicitly. (Leaving premises or subconclusions implicit is sometimes a harmless way of keeping the presentation short. At other times, paying attention to what has been left implicit reveals a serious flaw in the argument.)

Incarnation

The Christian doctrine that God became human in Jesus of Nazareth.

inference

To infer, or to offer an inference, is to suggest that one claim, namely the **conclusion** of the inference, is supported by some others, namely the **premises**. All **arguments** contain at least one inference, but sometimes they contain more than one (*see* **subconclusion**). Inferences are often expressed using phrases like ‘Therefore ...’, ‘So ...’, ‘Hence ...’ or ‘It follows that ...’.

information-intensive system

A biological system which contains a lot of **biological information**.

intelligent design

The thesis that evolution is not a random or chance process, but one which has been directed by God.

irreducible complexity

Complexity in life-forms that cannot be evolutionarily explained by evolutionary explanations of their simpler parts.

miracle

A **supernatural** event which is reasonably seen as the action of God, or the gods, or some supernatural agent.

ontological argument

An argument that infers God’s existence from the idea of God.

onus of proof

The side of the argument that needs to do some work to give evidence for its claim. For example, in a British court, the onus of proof is on the prosecution – the defendant is ‘innocent until proven guilty’. Many would say that if someone says that the world exists, they face no onus of proof, whereas if they say that God exists, they do need to do some work to give evidence for this claim.

order of causes

An order of causes is a series of cause-effect sequences: for example, dominoes falling over or a chemical chain-reaction.

pantheism

The belief that God is everything.

polytheism

The belief that there is more than one God, characteristic of religions like Hinduism and the traditional Viking, Greek and Roman religions.

precise organisation

Organisation of a kind **fine-tuned** to **functionality**.

premise

In an argument, the premises are the assumptions that, taken together, supposedly support the **conclusion**. They are what the **argument** 'rests on'. For example, in the argument 'All men are mortal; Socrates is a man; therefore Socrates is mortal', the two premises are that all men are mortal and that Socrates is a man.

problem of evil

The problem, for the theist, of explaining why there is evil in the world, if God is both perfectly good and perfectly powerful. *See* **Epicurus' riddle**.

religion

A system of belief in and worship of a supernatural power(s) or God(s).

religious experience

Experience or sense of God's presence, or the presence of some other supernatural being. A *genuine* religious experience is a religious experience that really is a sign of God, and is not akin to a hallucination.

Resurrection

The Christian doctrine that Jesus of Nazareth, having been crucified on a Friday, in about April ad 30, was raised from the dead on the Sunday afterwards.

'Second Way'

See Aquinas's 'Second Way'.

self-organising system

Any system in which impressively complex organisation is the result of very simple physical processes.

sound

An argument is sound if its **premises** are true and the **inference** from them to its **conclusion** is **valid**.

subconclusion

A conclusion reached, within an argument, along the way to a main conclusion.

supernatural

Something to which the normal methods of naturalistic scientific explanation, or other methods of explanation consistent with naturalistic science, fail to apply.

teleological argument

See argument from design.

testimony

Reports from other people.

theism

Belief in the existence of a God or gods.

theologian

Theology often overlaps with philosophy of religion, but theologians tend to be interested in the proper interpretation of a particular religion.

valid

To say that an argument (or an inference in an argument) is valid is to say that it is guaranteed to be truth-preserving: if the premises are true, then this truth is bound to carry over to the conclusion. (Another common way of defining 'validity' is this: in a valid argument, it is absolutely impossible for all the premises to be true without the conclusion being true.)

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Pocket watch. Photo: © istockphoto.com/winterling.

Chapter 2

'All things dull and ugly'. Copyright © Monty Python. Reproduced by permission.

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The Philosophy of Religion

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